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VIRULENT SMALLPOX, NEW BEDFORD, MASS.

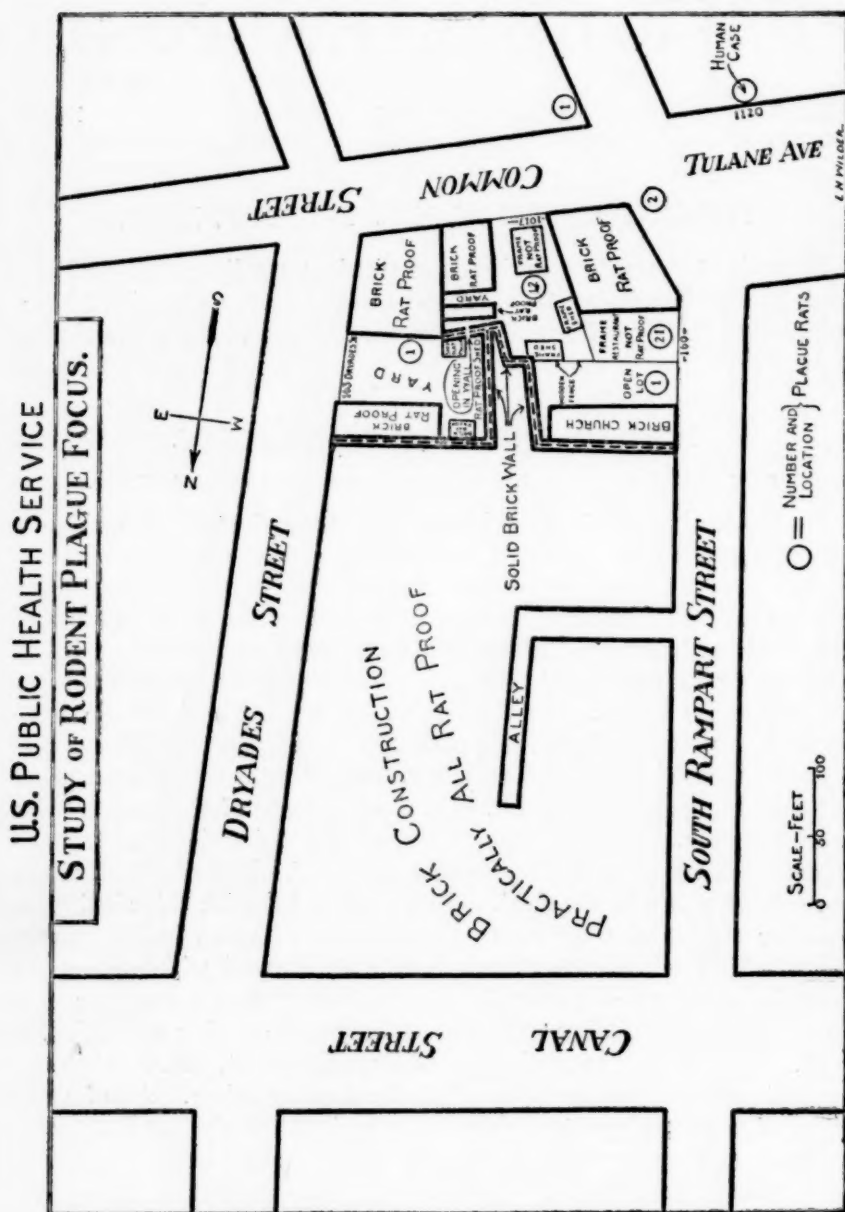
There is at present an outbreak of virulent smallpox at New Bedford, Mass. Since May 15, there have been 10 cases, of which 3 have terminated fatally. Four of the cases have been of the hemorrhagic type.

NOTE ON A RODENT PLAGUE FOCUS.

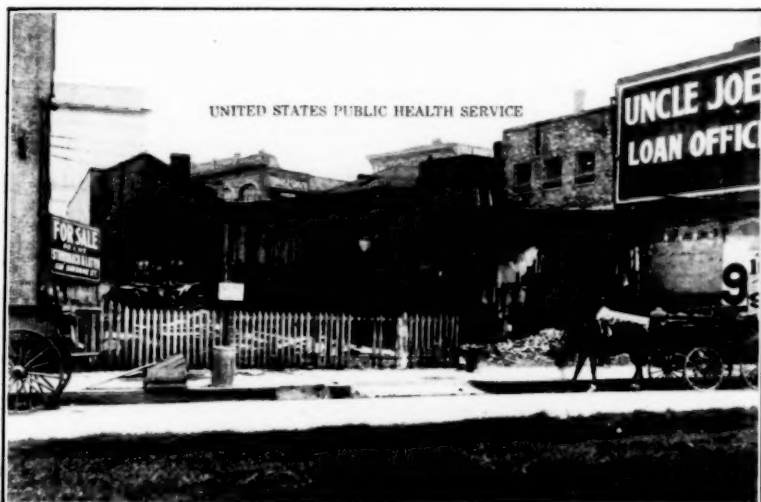
By W. C. RUCKER, Assistant Surgeon General, United States Public Health Service.

On September 11, 1914, a female *Mus norvegicus* was found dead on the street at the corner of Common and South Rampart Streets in the city of New Orleans. A laboratory examination of this rat proved it plague infected. As it was not altogether improbable that the dead rat had been thrown into the street by some person living or working in the neighborhood, an intensive search was made to determine its origin. On September 16 an infected female *Mus norvegicus* was found at 160 South Rampart Street, a Chinese restaurant, located in a ramshackle frame building between a rat-proof brick building and an open lot. On the other side of the open lot was a brick church. With the exception of a few openings into the gratings underneath the church, this was also rat proof. Directly back of the restaurant was a frame shed. On the same lot with this shed were another shed and a frame cottage. None of these buildings was rat proof. Back of the church was a brick wall which extended irregularly toward Common Street and finally met the corner of a brick rat-proof building. There was only one opening through this wall. This led to the premises at 163 Dryades Street. In the clean-up operations which followed, 38 infected rats were taken. All of these were *Mus norvegicus*, 10 being males and 28 females. Of 135 rats secured in cleaning up this focus 113 were found dead; 2 infected rats were found on the corner of Common and South Rampart Streets, 21 in the Chinese restaurant at 160 South Rampart Street, 1 in the open lot next to it, 12 on the premises at 1017 Common Street, 1 at 163 Dryades Street, and 1 at 200 South Rampart Street.

It is interesting to inquire why plague rats were not found in the remainder of the block and why this focus was not more widespread. The square in which the focus was found is bounded by Common



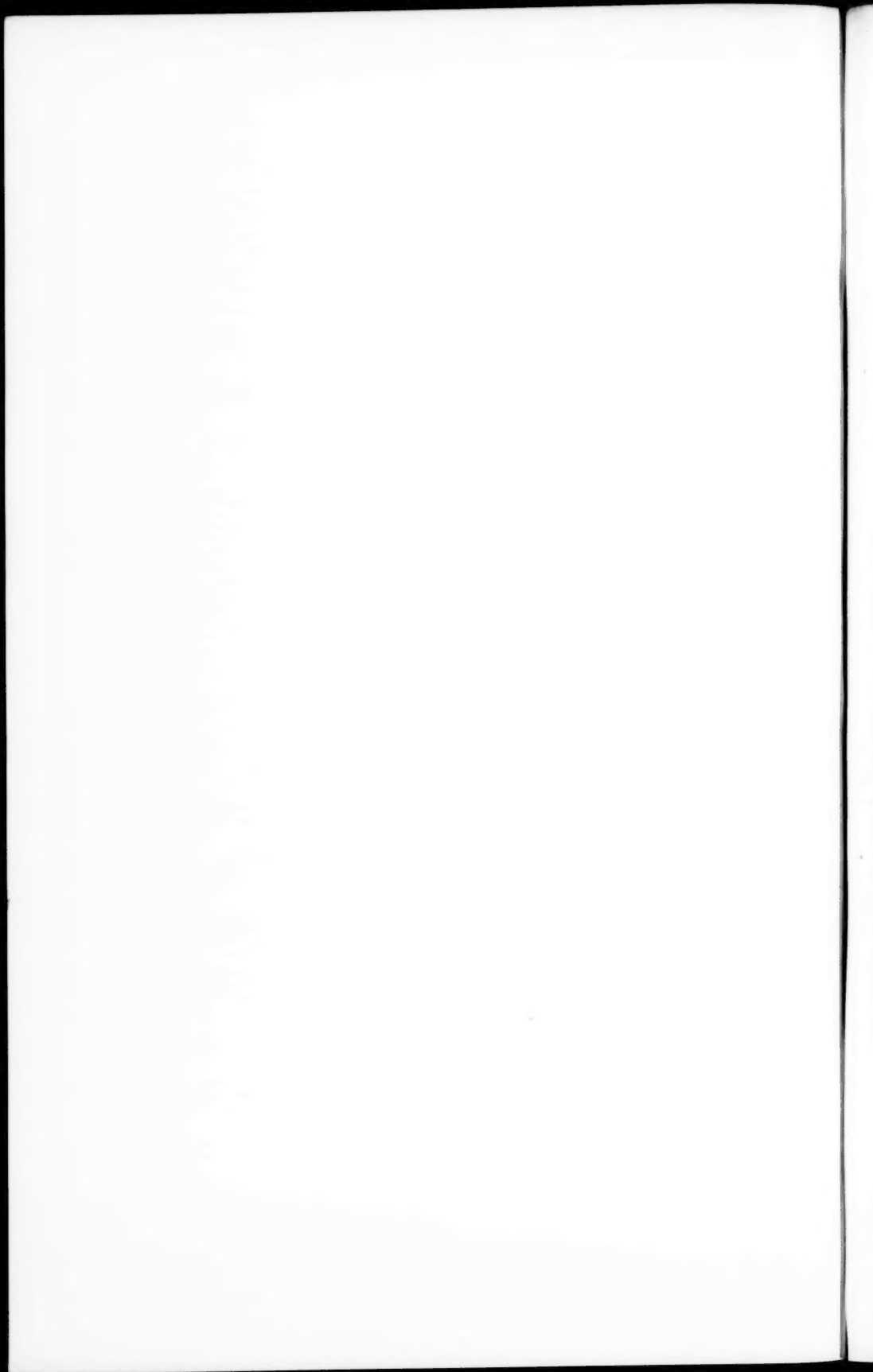
Street, Dryades Street, Canal Street, and Rampart Street. It is in the heart of New Orleans. The population of the block is cosmopolitan. Practically all of the block, with the exception of the



PREMISES AT 160 SOUTH RAMPART STREET UNDERGOING DEMOLITION.



PREMISES AT 160 SOUTH RAMPART STREET AFTER ERECTION OF RAT-PROOF STRUCTURE.



premises at 160 South Rampart Street and 1017 Common Street, is rat proof. Beginning at the corner of the church there is a brick wall which extends entirely across the block. This has no opening. Therefore, ground rats could not leave the focus without entering the street, and since there was an ample food supply at the Chinese restaurant there was no necessity for their so doing. Had this been a focus in which *Mus rattus* or *Mus alexandrinus*, i. e. climbing rats, abounded, there would have been greater opportunity for their leaving the original zone, but being ground rats they were hemmed in by the brick walls, and since the exterminative operations were intense they had little opportunity to cross the streets.

When the heavily infected focus was discovered, the building at 160 South Rampart Street was torn down. The frame sheds behind it were rendered noninhabitable for rats. The flooring at 1017 South Rampart Street was taken up, as were also the wooden side-walks.

In these operations a considerable number of rats were killed and a large number found dead. Thorough fumigation was practiced and the premises washed down thoroughly with tank oil emulsion for the purpose of killing fleas. This work was intensive and so far as is known the only rats that escaped from the original focus were the one which evidently passed through the opening in the wall and entered the yard at 163 Dryades Street, and the one which crossed the street to 200 South Rampart Street. Two guinea pigs were placed in the premises at 1017 South Common Street after the fumigation of the premises. One contracted plague and died. The place was refumigated. Guinea pig controls at 160 and 162 South Rampart Street, and further controls at 1017 Common Street, did not contract the disease. No infected rats were found at this focus after October 6, 1914.

One human case is attributable to this focus. This occurred in the person of one Ching Yu, a Chinese laundryman living at 1120 Tulane Avenue, within half a block of this focus. He was in the habit of taking his meals at the Chinese restaurant and was taken sick on September 30, 1914, 14 days after the discovery of the first infected rat at 160 South Rampart Street.

The ramshackle frame building which was occupied as a restaurant has been replaced with a rat-proof brick building.

Passed Asst. Surg. R. A. Kearny has supplied much of the data used in preparing this note.

THE PRACTICING PHYSICIAN.

HIS RELATION TO PUBLIC HEALTH ADMINISTRATION.¹

By JOHN W. TRASK, Assistant Surgeon General, United States Public Health Service.

The purpose of this paper is to bring to the attention of practicing physicians their relation to the work of local, State, and National health departments. It will be explained how it is impossible for the health department of a city, county, or State to perform the work for which it has been organized unless it has the cooperation of the practicing physician. It will be shown that even the health work of the National Government depends upon the assistance of the physician.

A principal function of the Federal health department is the control of epidemics and the prevention of the spread of disease from one State to another. It is impossible for the National Government to prevent the spread of disease from State to State unless it knows in which States, and where in these States, the diseases it wishes to control are prevalent. It can not prevent the spread of these diseases without knowing where they are present. It must get this information from the several State health departments.

In turn the State health departments can not furnish to the National Government information of the prevalence of disease within their respective jurisdictions, nor can they control the spread of disease within their respective States, unless they know what diseases are present and where they are present. Now, the State health department can secure this information of the prevalence of diseases only from the practicing physician, either by requiring the occurrence of cases to be directly reported to it or by requiring such reports to be made to the local health departments of cities and counties and the local officials to furnish the information to the State.

Nor can the local health departments, city, county, or township, prevent the occurrence of disease or control communicable diseases in their respective jurisdictions without a knowledge of what diseases are present and where and under what conditions they are occurring. This information they can obtain only from the practicing physicians by requiring reports of the occurrence of cases of the diseases to be controlled.

Thus it will be seen that national control of disease, State control of disease, and municipal and county control of disease all depend upon the cooperation of the practicing physician. Public health administration for the city, the county, the State, and the country as a whole depends for its success upon the information as to the prevalence of disease obtained from physicians' reports of cases.

¹ Read before the eighty-second annual meeting of the Tennessee State Medical Association, Nashville, Tenn., Apr. 13, 1915.

Our standard of living as a people is improving. Greater and greater consideration is being given to the conditions under which we live and work. We have come to realize that in any community the health and welfare of each individual and of each household depend in a large measure on the conditions of health and welfare of every other individual and of every other household.

In the complex life of modern civilization we can not individually protect ourselves from disease. The danger of infection from the sick and diseased whom we do not see and of whose existence we may be unaware may be greater than the danger from the sick among those immediately about us. We can protect ourselves from infection from the sick of whom we know, but we are in large measure helpless to protect ourselves from the disease of the sick of whose existence we are in ignorance. Every case of a communicable disease in a community is directly or indirectly a menace to every individual. The welfare of each depends upon the health of the community.

For a century or more there has been growing, at first slowly and in the last decade or two by leaps and bounds, an interest in social betterment. It is in a way a result of this movement that the part played by disease in determining the happiness, welfare, and efficiency of a community has been recognized. It has come to be realized that a community in which typhoid fever or malaria or any other disease prevails is a sick community and that a sick community is deprived of happiness and of efficiency to the extent to which it is sick.

Coincident with this period of growing social interest there has been a most unusual advance in the world's knowledge in many lines. There has been a great increase in knowledge, especially of the causes of disease and their manner of spread. It has been definitely ascertained that a great many diseases, which for centuries have afflicted mankind, are preventable, and that while the statement of Pasteur that, "It is within the power of man to cause all infectious diseases to disappear from the earth" may be as yet only a theoretical ideal, it has been frequently demonstrated that it is entirely practicable to banish from a community certain diseases and to control and gradually reduce the number of cases of many other diseases. There are many diseases which the average community harbors merely because the inhabitants lack the initiative, energy, and desire to protect themselves from them.

The present movement for social betterment has manifested itself in a larger compensation for wage earners, in shorter hours for workingmen, in the protection of women and children from excessive hours of labor, in the improvement of housing conditions, in greater attention to recreation, in the education of the people in useful subjects, and in the prevention and control of disease.

The establishment of health departments has been a part of the general movement. The work of these departments is to control the controllable diseases, and they can properly have no other function. Many communities have attained the attitude of mind in which they are insisting that all diseases which it is possible to control shall be controlled. It is only a question of time and social progress when all communities will reach the same determination.

The work of health departments being the control of the controllable diseases, it is important to consider the things essential to this work. It is impossible for any health department, be its statutory powers and available appropriations never so great, to effectively control any disease without first having information as to whether the disease is present in the community, and, if present, how prevalent and where and under what conditions cases are occurring. The burning of punk in the streets, or the placing of mystic symbols over the doorway, or the mere appointment of a health officer, and the appropriation of money will not protect against disease. The control of disease is a work which requires definite information and knowledge of the occurrence of cases made use of by persons trained in epidemiology; that is, by persons having knowledge of the conditions which produce disease or cause its spread.

There are two main classes of controllable diseases at present recognized. These are communicable diseases and occupational diseases. The communicable diseases spread from individual to individual. Each case is a focus from which many persons may receive infection. Each focus is a potential epidemic. With but one or two exceptions every attempt at the control of communicable diseases other than by ascertaining the cases that occur, and the conditions under which they develop, has been a failure.

Occupational diseases are due to industrial environment and can be prevented only by ascertaining where conditions exist which are capable of producing them in workmen. Each case of an occupational disease shows where conditions of this kind exist, for the fact that a case has developed is conclusive evidence of the presence of conditions capable of producing the disease. To find where conditions exist which will produce these diseases it is, therefore, necessary to know of each case that occurs, and the time, place, and conditions under which it occurs.

For diseases due to improper living or housing conditions, an economic or social or educational readjustment is required. The degree of the burden laid upon the community by the existence of such diseases and the need for a change in living or social conditions are also made manifest only by a knowledge of the cases of these diseases which occur and the conditions under which they occur.

The community is helpless to control any disease in the absence of definite knowledge of the conditions under which cases are occur-

ring, and a health department which does not know of the prevalence of disease within its jurisdiction is a health department in name only.

As a rule the heads of health departments have been physicians. This has been so for the reason that the physician, because of his training, is the one most capable of recognizing cases of disease, and presumably knows their methods of spread and the means by which they may be controlled. There is no doubt that a man with a medical education has a better foundation upon which to build the special knowledge necessary to make an efficient health officer than one trained in other lines.

The work of the health officer, however, requires special knowledge of diseases and their prevention or control. At the present time the courses given by even our best medical schools furnish to the student but little opportunity to acquire any but the most superficial knowledge of the prevention and control of disease in its relation to the community. To so great an extent has this been true that it is quite probable that the advances made in public health administration in this country have been due as much to the demands of social workers for efficient health officers as to any influence which medical practitioners may have had.

The action taken during the last few years by a number of the largest medical schools in the country in providing courses in preventive medicine for the training of health officers has without doubt been in response as much to the demands of social workers and other nonmedical persons as to any influence which has come from the medical practitioner. This is not said in a spirit of criticism. It is only what one would naturally expect.

In a way the social worker can properly be expected to be more interested in, and have a more thorough understanding of, the need for the establishment of efficient health departments and the prevention of disease, than can the practicing physician. The practicing physician encounters disease in detail. He sees one case at a time. His interest is in the patient rather than in the community, and his energies are spent in attempting to relieve the patient from the physical burden of sickness. In doing this he seldom takes into consideration the source from which the disease was contracted and that the conditions which made his patient sick may still be operating to make others ill, nor does he always take into consideration in communicable diseases that his patient may be a menace to the community and endangering others. If he does recognize this he does not always feel his responsibilities in the matter. The thought which it is desired to express is that the practicing physician has his thought and attention focused on getting his patient well, and that the significance of the occurrence of a case of disease as it relates to the community in general seldom appeals to him.

On the other hand, the business of the social worker and public health worker is the bettering of the conditions under which man lives. To them the misery and sorrow caused by disease are apparent. The bearing of disease on poverty and of poverty on disease are daily seen. The sickness caused by faulty industrial conditions is being constantly brought to their attention. In their daily work the need for the prevention of disease and the possibilities of its prevention are constantly before them. The social worker and health officer see the effect of disease on the community. The physician has to do with the disease of individuals, and although the physician may in many instances have a greater technical knowledge of the origin and effects of disease, his field of vision is narrowed by the nature of his calling.

The health department is established to cure the community of its diseases and to keep it well. The individual is significant to the health department only as his condition affects the community in general. The health department can properly have no function other than that of controlling disease in the community, and it is in this work that the practicing physician plays a vitally important part.

To control disease in the community the health department, as previously stated, must know when disease exists, where it exists, and under what conditions it occurs. To know this the health department must have a knowledge of the cases of controllable diseases as they occur. This knowledge of cases can be obtained only through the reports of the notifiable diseases made by physicians. The health department has no means of learning of the prevalence of disease other than the information obtained in this way. The health department does not go into the homes. It is not called upon to treat the sick as physicians are. Physicians are the only persons in the community who to any considerable extent come into contact with the sick and learn of the occurrence of disease.

Now, inasmuch as the health department can not do its work without information of the occurrence of cases of the controllable diseases and inasmuch as this information can be had only through the reports made by physicians of the occurrence of cases in their practice, the physician becomes an essential part of any scheme of public health administration. The practicing physician is essentially a part of the health department. This is true, whether the physician recognizes it or not, and whether the community recognizes it or not. The physician is the outpost, the picket that must give to the health department information of the approach of the enemy, his numerical strength, and his armament.

Cooperating with an efficient health officer the practicing physicians of a community have it within their power to make the efforts of the health department successful or to make their success impossible. So important is the control of disease to the welfare of the community,

and so essential is the cooperation of the practicing physician through the reporting of cases, that it may be taken for granted that intelligent communities will bring about a satisfactory cooperation in this work between the physicians and the health department. It is only a question whether a public spirited, humanitarian medical profession will take the initiative and voluntarily and cheerfully accept and carry out its responsibilities, as it undoubtedly will. Any other course is inconceivable. Certainly upon the attitude of the medical profession in this matter will largely depend its relations to the community in the future.

The practicing physician who fails to report a case of a communicable disease thereby endangers the welfare of the community and exposes others to the danger of contracting the disease, and among those thus exposed may be others of his patients. He is neither a good physician nor a good citizen, and must be considered as opposed to the principle of the control of disease and the protection of the community for which the health department stands.

With the help and cooperation of the practicing physician the health department can do much to prove the truth of Pasteur's statement that it is within the power of man to cause all infectious diseases to disappear. Without the cooperation of the practicing physician the health department can do but little.

PLAGUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended May 22, 1915, was received from Passed Asst. Surg. Hurley, of the Public Health Service, in temporary charge of the work:

San Francisco, Cal.

RAT PROOFING.		RAT PROOFING—continued.	
New buildings:		Old buildings—Continued.	
Inspection of work under construction.	164	Yards and passageways, planking removed.....	13
Basements concreted (square feet, 9,050).	22	Cubic feet new foundation walls installed.....	5,773
Floors concreted (square feet, 35,844)....	48	Concrete floors installed (square feet, 25,470).....	37
Yards, passageways, etc. (square feet, 14,789).....	35	Basements concreted (square feet, 17,874).....	38
Total area of concrete laid (square feet)...	59,683	Yards, passageways, etc., concreted (square feet, 27,008).....	91
Class A, B, and C (fireproof) buildings:		Total area concrete laid (square feet)....	70,432
Inspections made.....	245	Floors rat-proofed with wire cloth (square feet, 2,341).....	4
Roof and basement ventilators, etc., screened.....	4,910	Buildings razed.....	35
Wire screening used (square feet).....	27,270	New garbage cans stamped approved...	919
Openings around pipes, etc., closed with cement.....	8,699	Nuisances abated.....	489
Sidewalk lens lights replaced.....	3,000		
Old buildings:			
Inspections made.....	624		
Wooden floors removed.....	55		

OPERATIONS ON THE WATER FRONT.

Vessels inspected for rat guards.....	26
Reinspections made on vessels.....	17
New rat guards procured.....	10
Defective rat guards repaired.....	4
Rats trapped on wharves and water front..	24
Rats trapped on vessels.....	17
Traps set on wharves and water front.....	172
Traps set on vessels.....	42
Vessels trapped on.....	11
Poisons placed on water front (pieces).....	3,600
Poisons placed within Panama-Pacific International Exposition grounds (pieces).....	7,200
Bait used on water front and vessels, bacon (pounds).....	6

OPERATIONS ON THE WATER FRONT—continued.

Amount of bread used in poisoning water front (loaves).....	12
Pounds of poison used on water front.....	6

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Collected.....	249
Examined.....	212
Found infected.....	0

RATS IDENTIFIED

Mus norvegicus.....	136
Mus musculus.....	35
Mus alexandrinus.....	48
Mus rattus.....	30

Squirrels collected and examined for plague.

Contra Costa County.....	504
San Benito County.....	265
San Joaquin County.....	214
Alameda County.....	146
Merced County.....	95
Santa Clara County.....	78
Stanislaus County.....	41
Santa Cruz County.....	12

1,358

Ranches inspected and hunted over.

Contra Costa County.....	51
San Benito County.....	44
San Joaquin County.....	23
Alameda County.....	26
Merced County.....	16
Santa Clara County.....	6
Stanislaus County.....	2
Santa Cruz County.....	6

174

Squirrels found infected.....	0
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Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley.....	Aug. 28, 1907	(1)	(1)	(1)
Los Angeles.....	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	² Oct. 17, 1909	Aug. 7, 1914	286 squirrels, 1 wood rat.
Contra Costa.....	May 17, 1914	(1)	Mar. 4, 1915	1,567 squirrels.
Fresno.....	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced.....	(1)	(1)	July 12, 1911	5 squirrels.
Monterey.....	(1)	(1)	Apr. 10, 1914	6 squirrels.
San Benito.....	June 4, 1913	(1)	Apr. 13, 1915	37 squirrels.
San Joaquin.....	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
San Luis Obispo.....	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Aug. 31, 1910	(1)	July 23, 1913	25 squirrels.
Santa Cruz.....	(1)	(1)	May 17, 1910	3 squirrels.
Stanislaus.....	(1)	(1)	June 2, 1911	13 squirrels.

¹ None.² Wood rat.

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Merced, San Joaquin, Santa Cruz, Stanislaus, San Benito, Santa Clara, and San Mateo.

WASHINGTON—SEATTLE—PLAGUE ERADICATION.

The following report of plague-eradication work at Seattle for the week ended May 22, 1915, was received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

RAT PROOFING.		WATER FRONT.	
New buildings inspected.....	25	Vessels inspected and histories recorded....	8
Basements concreted, new buildings (square feet, 7,680).....	9	New rat guards installed.....	6
Floors concreted, new buildings (square feet, 25,475).....	18	Port sanitary statements issued.....	39
Yards, etc., concreted, new structures (square feet, 1,960).....	3	The usual day and night patrol was maintained to enforce rat guarding and fending.	
Sidewalks concreted (square feet).....	22,490	MISCELLANEOUS WORK.	
Total concrete laid, new structures (square feet).....	57,605	Rat-proofing notices sent to contractors....	13
New buildings elevated.....	5	Fishing vessels inspected and medicine chests installed.....	3
New premises rat proofed, concrete.....	27	RODENTS EXAMINED IN EVERETT.	
Buildings inspected (old).....	4	Mus norvegicus.....	43
Wooden floors removed, old buildings.....	2	Mus norvegicus found dead.....	4
Buildings razed.....	5	Mus alexandrinus trapped.....	2
LABORATORY AND RODENT OPERATIONS.		Mus musculus trapped.....	2
Dead rodents received.....	15	Total.....	51
Rodents trapped and killed.....	369	Rodents examined for plague infection.....	50
Total.....	384	Rodents proven plague-infected.....	0
Rodents examined for plague infection.....	301	RAT-PROOFING OPERATIONS IN EVERETT.	
Rodents proven plague-infected.....	0	New buildings inspected.....	5
Poison distributed (pounds).....	15	New buildings rat proofed by concrete foundations.....	5
Bodies examined for plague infection.....	4	Basements concreted, new building (square feet, 840).....	1
Bodies found plague-infected.....	0	Yards concreted (square feet, 151).....	1
CLASSIFICATION OF RODENTS.		Total concrete laid, new structures (square feet).....	991
Mus rattus.....	9		
Mus alexandrinus.....	39		
Mus norvegicus.....	280		
Mus musculus.....	56		

HAWAII—PLAGUE PREVENTION.

The following reports of plague-prevention work in Hawaii were received from Surg. Trotter, of the Public Health Service:

Honolulu.

WEEK ENDED MAY 15, 1915.

Total rats and mongoose taken.....	419	Average number of traps set daily.....	1,055
Rats trapped.....	415	Cost per rat destroyed.....cents..	19½
Mongoose trapped.....	4	Last case rat plague, Aiea, 9 miles from Honolulu, Apr. 12, 1910.	
Examined microscopically.....	355	Last case human plague, Honolulu, July 12, 1910.	
Showing plague infection.....	0	Last case rat plague, Kalopa Stable, Paauhau, Hawaii, Aug. 29, 1914.	
Classification of rats trapped:		Last case human plague, Paauhau Landing, Hawaii, Aug. 17, 1914.	
Mus alexandrinus.....	220		
Mus musculus.....	109		
Mus norvegicus.....	67		
Mus rattus.....	19		

June 11, 1915

1756

Hilo.

WEEK ENDED MAY 9, 1915.

Rats and mongoose taken.....	2,473	Classification of rats trapped and found	
Rats trapped.....	2,441	dead—Continued.	
Mongoose taken.....	32	Mus rattus.....	776
Rats and mongoose examined microscopi-		Mus musculus.....	727
cally.....	2,473	Last case of rat plague, Paauhau Sugar Co., Aug.	
Rats and mongoose plague infected.....	0	29, 1914.	
Classification of rats trapped and found dead:		Last case of human plague, Paauhau Sugar Co.,	
Mus norvegicus.....	573	Aug. 16, 1914.	
Mus alexandrinus.....	365		

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

CEREBROSPINAL MENINGITIS.

State Reports for April, 1915.

Places.	New cases reported.	Places.	New cases reported.
Arkansas:		Mississippi:	
Newton County.....	1	Hinds County.....	1
Kansas:		Holmes County.....	2
McPherson County.....	1	Lawrence County.....	1
Montgomery County—		Scott County.....	2
Coffeyville.....	1	Tallahatchie County.....	1
Wyandotte County—		Total.....	7
Kansas City.....	1		
Total.....	3		

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Bridgeport, Conn.....	1	1	Lexington, Ky.....		1
Buffalo, N. Y.....	1		Los Angeles, Cal.....	1	1
Chicago, Ill.....	8		Manchester, N. H.....	1	1
Columbus, Ohio.....	1		New York, N. Y.....	6	1
Detroit, Mich.....	1		Philadelphia, Pa.....	1	
Duluth, Minn.....	2	2	Providence, R. I.....	1	
Fitchburg, Mass.....	1		South Bend, Ind.....	1	1
Haverhill, Mass.....	1		Tacoma, Wash.....	1	

DIPHTHERIA.

California—San Francisco.

Passed Asst. Surg. Hurley reported by telegraph that during the week ended June 5, 1915, 59 new cases of diphtheria, with 3 deaths, were notified in San Francisco, Cal.

During the month of May, 1915, 154 cases of diphtheria, with 17 deaths, were notified in San Francisco, making a total of 1,316 cases reported since July 1, 1914.

See also Diphtheria, measles, scarlet fever, and tuberculosis, p. 1766.

ERYSIPELAS.

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.		1	Los Angeles, Cal.	3	
Berkeley, Cal.	1		Madison, Wis.	1	
Boston, Mass.		1	Milwaukee, Wis.	3	
Bridgeport, Conn.	1		Morristown, N. J.	1	
Brockton, Mass.	2		New York, N. Y.		13
Buffalo, N. Y.	1		Passaic, N. J.	1	
Chicago, Ill.	33	5	Philadelphia, Pa.	7	1
Cincinnati, Ohio.	4	4	Pittsburgh, Pa.	9	1
Cleveland, Ohio.	8	1	Portland, Oreg.	1	
Dayton, Ohio.		1	Reading, Pa.	2	
Detroit, Mich.	7		Rochester, N. Y.	3	1
Duluth, Minn.	1		St. Louis, Mo.	7	
Erie, Pa.	1		San Francisco, Cal.	5	1
Harrisburg, Pa.	2		Seattle, Wash.	3	
Hartford, Conn.	2		Stockton, Cal.	1	
Jersey City, N. J.	1	1	Tacoma, Wash.	1	
Johnstown, Pa.		1	Wilkes-Barre, Pa.	2	
Lincoln, Nebr.		1			

LEPROSY.

Hawaii Report for April, 1915.

During the month of April, 1915, new cases of leprosy were notified on the island of Oahu, Hawaii, as follows: Ewa district, 2; Honolulu, 4; Koolaupoko district, 1; Koolauloa district, 1.

MALARIA.

State Reports for April, 1915.

Places.	New cases reported.	Places.	New cases reported.
Arkansas.....	180	Mississippi—Continued.	
Mississippi:		Jones County.....	236
Adams County.....	14	Kemper County.....	49
Alcorn County.....	14	Lafayette County.....	25
Amite County.....	56	Lamar County.....	73
Attala County.....	61	Lauderdale County.....	81
Benton County.....	11	Lawrence County.....	112
Bolivar County.....	452	Leake County.....	30
Calhoun County.....	12	Lee County.....	104
Carroll County.....	47	Leflore County.....	236
Chickasaw County.....	32	Lincoln County.....	31
Choctaw County.....	28	Lowndes County.....	54
Clalborne County.....	75	Madison County.....	60
Clarke County.....	30	Marion County.....	110
Clay County.....	50	Marshall County.....	26
Coahoma County.....	336	Monroe County.....	31
Copiah County.....	101	Montgomery County.....	16
Covington County.....	62	Neshoba County.....	49
De Soto County.....	11	Newton County.....	18
Forrest County.....	149	Noxubee County.....	31
Franklin County.....	28	Oktibbeha County.....	68
George County.....	18	Panola County.....	96
Greene County.....	25	Pearl River County.....	12
Grenada County.....	39	Perry County.....	34
Hancock County.....	33	Pike County.....	75
Harrison County.....	120	Pontotoc County.....	23
Hinds County.....	126	Prentiss County.....	9
Holmes County.....	210	Quitman County.....	59
Issaquena County.....	11	Rankin County.....	20
Hawamba County.....	30	Scott County.....	32
Jackson County.....	19	Simpson County.....	50
Jasper County.....	46	Smith County.....	51
Jefferson County.....	56	Sunflower County.....	461
Jefferson Davis County.....	18	Tallahatchie County.....	162
		Tate County.....	131

MALARIA—Continued.**State Reports for April, 1915—Continued.**

Places.	New cases reported.	Places.	New cases reported.
Mississippi—Continued.		Mississippi—Continued.	
Tippah County.....	20	Wilkinson County.....	5
Tishomingo County.....	5	Winston County.....	73
Tunica County.....	152	Yalobusha County.....	39
Union County.....	6	Yazoo County.....	328
Warren County.....	157	Walthall County.....	4
Washington County.....	310	Total.....	6,078
Wayne County.....	33		
Webster County.....	10		

City Reports for Week Ended May 22, 1915.

During the week ended May 22, 1915, malaria was notified in cities as follows: Lowell, Mass., 1 case; Montclair, N. J., 1 case; Newton, Mass., 1 case; Springfield, Mass., 2 cases.

MEASLES.**California—Los Angeles.**

Senior Surg. Brooks reported that during the month of May, 1915, 1,279 cases of measles, with 2 deaths, were notified in Los Angeles, Cal., making a total of 4,986 cases, with 7 deaths, reported since the beginning of unusual prevalence about February 1, 1915.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1763.

PELLAGRA.**State Reports for April, 1915.**

Places.	New cases reported.	Places.	New cases reported.
Arkansas.....	60	Mississippi—Continued.	
Kansas.....	1	Itawamba County.....	7
Mississippi:		Jackson County.....	4
Adams County.....	5	Jasper County.....	1
Alcorn County.....	3	Jefferson Davis County.....	4
Attala County.....	11	Jones County.....	22
Amite County.....	1	Kemper County.....	3
Benton County.....	4	Lafayette County.....	2
Bolivar County.....	122	Lamar County.....	12
Calhoun County.....	1	Lauderdale County.....	15
Carroll County.....	5	Lawrence County.....	14
Chickasaw County.....	18	Leake County.....	7
Claiborne County.....	5	Lee County.....	29
Clarke County.....	7	Leflore County.....	30
Clay County.....	6	Lincoln County.....	32
Coahoma County.....	80	Lowndes County.....	7
Copiah County.....	40	Madison County.....	10
Covington County.....	20	Marion County.....	15
De Soto County.....	10	Marshall County.....	24
Forrest County.....	33	Monroe County.....	26
Franklin County.....	9	Montgomery County.....	3
George County.....	5	Neshoba County.....	19
Greene County.....	2	Newton County.....	7
Grenada County.....	5	Noxubee County.....	13
Harrison County.....	22	Oktibbeha County.....	8
Hinds County.....	52	Panola County.....	13
Holmes County.....	25	Pearl River County.....	1
		Perry County.....	2
		Pike County.....	15

PELLAGRA—Continued.

State Reports for April, 1915—Continued.

Places.	New cases reported.	Places.	New cases reported.
Mississippi—Continued.		Mississippi—Continued.	
Pontotoc County.....	3	Union County.....	2
Prentiss County.....	3	Walthall County.....	2
Quitman County.....	22	Warren County.....	38
Scott County.....	13	Washington County.....	73
Simpson County.....	8	Wayne County.....	8
Smith County.....	7	Wilkinson County.....	1
Sunflower County.....	144	Winston County.....	9
Tallahatchie County.....	63	Yalobusha County.....	4
Tate County.....	7	Yazoo County.....	31
Tippah County.....	2	Total.....	1,299
Tishomingo County.....	3		
Tunica County.....	20		

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	2	.....	Mobile, Ala.....	.....	2
Brownsville, Tex.....	1	.....	Nashville, Tenn.....	3	4
Charleston, S. C.....	.....	3	New Orleans, La.....	6	5
Little Rock, Ark.....	1	.....	Richmond, Va.....	.....	1
Lynchburg, Va.....	3	.....	Wilmington, N. C.....	1	1

PNEUMONIA.

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Binghamton, N. Y.....	1	.....	Manchester, N. H.....	1	1
Chicago, Ill.....	119	57	Muscatine, Iowa.....	1	.....
Cleveland, Ohio.....	19	13	Norfolk, Va.....	1	1
Coffeyville, Kans.....	1	.....	Philadelphia, Pa.....	26	17
Dayton, Ohio.....	6	4	Pittsburgh, Pa.....	20	12
Duluth, Minn.....	1	1	Reading, Pa.....	1	1
Fall River, Mass.....	2	.....	Rochester, N. Y.....	1	3
Grand Rapids, Mich.....	6	.....	Sacramento, Cal.....	1	1
Harrisburg, Pa.....	1	.....	San Francisco, Cal.....	10	4
Kansas City, Kans.....	1	.....	Stockton, Cal.....	2	2
Los Angeles, Cal.....	5	5	Toledo, Ohio.....	2	.....

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1915.

Places.	New cases reported.	Places.	New cases reported.
Arkansas:		Mississippi—Continued.	
Sebastian County.....	1	Lafayette County.....	1
Mississippi:		Newton County.....	1
Attala County.....	1	Panola County.....	1
Hancock County.....	1	Yazoo County.....	1
Holmes County.....	2	Total.....	8

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.**City Reports for Week Ended May 22, 1915.**

During the week ended May 22, 1915, cases of poliomyelitis were notified in cities as follows: New York, N. Y., 1; Passaic, N. J., 1.

ROCKY MOUNTAIN SPOTTED FEVER.**Oregon Reports for March and April, 1915.**

The State board of health of Oregon reported that during the month of March, 1915, 4 cases of Rocky Mountain spotted fever were notified in Grant County, Oreg., and that during the month of April, 1915, 13 cases of the disease were notified in the same county.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1766.

SMALLPOX.**Kansas.**

Collaborating Epidemiologist Crumbine reported by telegraph that during the week ended June 5, 1915, new cases of smallpox were notified in counties of Kansas as follows: Cherokee, 4; Crawford, 4; Greenwood, 4; Jefferson, 1; Marion, 1; Montgomery, 1; Reno, 3; Rice, 2; Republic, 2; Sedgwick, 4; Stevens, 7; Wyandotte, 2.

Massachusetts—New Bedford—Virulent Smallpox.

Acting Asst. Surg. Cody reported by telegraph June 8, 1915, that 5 new cases of smallpox, with 2 deaths, had been notified in New Bedford, Mass., making a total of 10 cases, with 3 deaths, reported since the beginning of the outbreak about May 15, 1915.

All cases occurred in natives of Cape Verde, only two of the patients had ever been vaccinated, and except in these two the disease was of very virulent type, being of hemorrhagic form in four of the cases.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended June 5, 1915, new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Clay County, Holy Cross Township, 2; Crow Wing County, Riverton, 1; Freeborn County, Freeborn Township, 2; Rock County, Rosedell Township, 1.

SMALLPOX—Continued.

Kansas Reports for April, 1915.

Places.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Kansas:						
Anderson County.....	10				8	2
Atchison County—						
Atchison.....	5				4	1
Barber County.....	1				1	
Barton County.....	6				2	4
Chase County.....	3		1	1		1
Cherokee County.....	14			1	6	7
Clark County.....	1				1	
Clay County.....	4					4
Coffey County.....	4				4	
Comanche County.....	8			1	7	
Cowley County.....	1					1
Crawford County.....	10				10	
Pittsburg.....	9				4	5
Decatur County.....	1					1
Doniphan County.....	2				2	
Douglas County.....	4				2	2
Edwards County.....	2				1	1
Ford County.....	5			3	2	
Gray County.....	1			1		
Greenwood County.....	4				4	
Harper County.....	10					10
Jewell County.....	1				1	
Johnson County.....	2					2
Kingman County.....	3				3	
Labette County.....	1				1	
Parsons.....	2				2	
Lane County.....	12				11	1
Leavenworth County.....	1					1
Leavenworth.....	2					2
Lyon County.....	1			1		
Miami County.....	1					1
Montgomery County.....	11				7	4
Morris County.....	1				1	
Morton County.....	2				2	
Osage County.....	4				4	
Osborne County.....	3				2	1
Pawnee County.....	2				2	
Phillips County.....	9				3	6
Pratt County.....	2				2	
Reno County.....	9				9	
Hutchinson.....	16				13	3
Republic County.....	11				8	3
Rice County.....	1					
Saline County.....	3				1	2
Sedgwick County.....	4				3	1
Wichita.....	13					13
Shawnee County—						
Topeka.....	1				1	
Smith County.....	13			1	8	4
Sumner County.....	48			1	23	24
Wilson County.....	2			1		1
Wyandotte County.....	7				7	
Kansas City.....	23				1	22
Total.....	316		1	11	175	129

SMALLPOX—Continued.

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Arkansas (Apr. 1-30):			Oregon (Nov. 1-30):		
Counties—			Clackamas County.....	1	
Calhoun.....	4		Douglas County.....	2	
Franklin.....	2		Klamath County.....	1	
Hot Springs.....	6		Multnomah County—		
Independence.....	1		Portland.....	13	
Lafayette.....	3		Polk County.....	3	
Little River.....	1		Umatilla County.....	1	
Newton.....	11		Total.....	20	
Ouachita.....	3				
Pulaski.....	7		Oregon (Jan. 1-31):¹		
Scott.....	3		Clackamas County.....	9	
Sebastian.....	2		Josephine County.....	4	
Washington.....	19		Total.....	13	
Total.....	62				
Mississippi (Apr. 1-30):			Oregon (Feb. 1-28):		
Counties—			Benton County.....	2	
Bolivar.....	14		Clackamas County.....	36	
Carroll.....	2		Clatsop County.....	18	
Chickasaw.....	1		Jackson County.....	17	
Claiborne.....	1		Josephine County.....	5	
Coahoma.....	46		Multnomah County.....	2	
Copiah.....	12		Portland.....	15	
De Soto.....	11		Tillmanook County.....	3	
Harrison.....	3		Umatilla County.....	12	
Hinds.....	12		Total.....	110	
Holmes.....	58				
Jones.....	10		Oregon (Mar. 1-31):		
Lauderdale.....	29		Baker County.....	2	
Leflore.....	2		Clackamas County.....	9	
Lincoln.....	12		Clatsop County.....	26	
Madison.....	4		Coos County.....	1	
Monroe.....	26		Jackson County.....	15	
Neshoba.....	9		Linn County.....	4	
Newton.....	30		Multnomah County.....	2	
Pike.....	1		Portland.....	30	
Pontotoc.....	8		Umatilla County.....	1	
Scott.....	19		Washington County.....	4	
Smith.....	5		Total.....	94	
Sunflower.....	122				
Tallahatchie.....	4		Oregon (Apr. 1-30):		
Tate.....	2		Clackamas County.....	19	
Warren.....	1		Clatsop County.....	4	
Washington.....	4		Lane County.....	1	
Walthall.....	4		Linn County.....	9	
Wayne.....	3		Marion County.....	1	
Total.....	455		Multnomah County.....	1	
Oregon (Sept. 1-30):			Portland.....	6	
Clackamas County.....	2		Washington County.....	33	
Douglas County.....	1		Total.....	74	
Klamath County.....	1				
Multnomah County—					
Portland.....	1				
Washington County.....	3				
Total.....	8				

¹ Supplemental to report published in Public Health Reports March 12, 1915, page 784.

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Akron, Ohio.....	1		Lexington, Ky.....	2	
Baltimore, Md.....	2		Lincoln, Nebr.....	3	
Brownsville, Tex.....	5	1	Madison, Wis.....	4	
Butte, Mont.....	5		Marquette, Wis.....	1	
Charleston, S. C.....	4		Milwaukee, Wis.....	1	
Danville, Ill.....	6		New Bedford, Mass.....	2	
Davenport, Iowa.....	20		New London, Conn.....	2	
El Paso, Tex.....	1		Newport, Ky.....	3	
Evansville, Ind.....	2		Portland, Ore.....	10	
Green Bay, Wis.....	1		Rock Island, Ill.....	3	
Kalamazoo, Mich.....	1		St. Louis, Mo.....	10	
Kansas City, Kans.....	5		San Diego, Cal.....	1	
Kokomo, Ind.....	2		Washington, D. C.....	2	

TETANUS.

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Charleston, S. C.....		2	New York, N. Y.....	1	1
Cleveland, Ohio.....	1		Philadelphia, Pa.....		1
Mobile, Ala.....		1			

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1766.

TYPHOID FEVER.

State Reports for April, 1915.

Places.	New cases reported.	Places.	New cases reported.
Arkansas:		Mississippi—Continued.	
Clay County.....	1	Choctaw County.....	4
Faulkner County.....	3	Claiborne County.....	2
Greene County.....	1	Coahoma County.....	1
Hot Spring County.....	1	Copiah County.....	1
Independence County.....	2	Covington County.....	3
Lee County.....	2	De Soto County.....	1
Newton County.....	1	Forrest County.....	6
Pulaski County.....	1	Franklin County.....	1
Sebastian County.....	3	Greene County.....	1
St. Francis County.....	1	Grenada County.....	1
Stone County.....	1	Hancock County.....	1
Washington County.....	1	Harrison County.....	3
White County.....	6	Hinds County.....	9
Yell County.....	1	Holmes County.....	9
Total.....	25	Jasper County.....	1
Hawaii:		Jefferson Davis County.....	2
Hawaii—		Jones County.....	3
Hamakua District.....	1	Kemper County.....	1
Maul—		Lafayette County.....	4
Makawao District.....	1	Lamar County.....	3
Puunene and Kihel District.....	1	Lauderdale County.....	4
Oahu—		Lawrence County.....	3
Ewa District.....	2	Leake County.....	3
Honolulu.....	7	Lee County.....	3
Koolaupoko District.....	2	Lincoln County.....	1
Total.....	15	Marion County.....	4
Kansas:		Marshall County.....	3
Atchison County—		Monroe County.....	1
Atchison.....	1	Montgomery County.....	1
Bourbon County—		Oktibbeha County.....	2
Fort Scott.....	1	Parola County.....	4
Cherokee County.....	5	Pike County.....	1
Crawford County.....	1	Scott County.....	5
Doniphan County.....	1	Simpson County.....	1
Greenwood County.....	1	Smith County.....	2
Harvey County.....	2	Sunflower County.....	5
Kingman County.....	1	Tallahatchie County.....	4
Marion County.....	3	Tate County.....	12
Montgomery County.....	1	Tippah County.....	3
Reno County.....	1	Tishomingo County.....	5
Hutchinson.....	1	Tunica County.....	3
Shawnee County—		Union County.....	3
Topeka.....	2	Walthall County.....	2
Sumner County.....	2	Warren County.....	2
Wabaunsee County.....	1	Washington County.....	7
Wyandotte County—		Webster County.....	1
Kansas City.....	2	Winston County.....	1
Total.....	26	Yalobusha County.....	4
Mississippi:		Yazoo County.....	9
Alcorn County.....	3	Total.....	173
Amite County.....	3	Oregon:	
Attala County.....	4	Clackamas County.....	1
Benton County.....	1	Columbia County.....	1
Bolivar County.....	6	Lake County.....	1
		Multnomah County—	
		Portland.....	3
		Total.....	6

TYPHOID FEVER—Continued.
Oregon—Miscellaneous Reports.

Places.	New cases reported.	Places.	New cases reported.
September:		February:	
Coos County.....	1	Benton County.....	1
Jackson County.....	1	Josephine County.....	1
Josephine County.....	1	Lane County.....	1
Lane County.....	5	Lincoln County.....	1
Linn County.....	3	Marion County.....	2
Marion County.....	19	Multnomah County—	
Morrow County.....	1	Portland.....	4
Multnomah County.....	1	Umatilla County.....	1
Portland.....	2	Total.....	11
Polk County.....	1		
Total.....	35	March:	
November:		Lane County.....	3
Benton County.....	1	Linn County.....	2
Hood River County.....	1	Marion County.....	1
Josephine County.....	1	Multnomah County—	
Klamath County.....	1	Portland.....	5
Lane County.....	1	Total.....	11
Marion County.....	2		
Morrow County.....	1		
Multnomah County—			
Portland.....	2		
Polk County.....	1		
Total.....	11		

City Reports for Week Ended May 22, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Alameda, Cal.....	3		Milwaukee, Wis.....	1	
Atlantic City, N. J.....	1		Mobile, Ala.....	2	1
Aurora, Ill.....	1		Nashville, Tenn.....	8	2
Baltimore, Md.....	9	1	New Bedford, Mass.....	4	
Beaver Falls, Pa.....	1		Newburyport, Mass.....	1	
Boston, Mass.....	4		New Castle, Pa.....	3	
Bridgeport, Conn.....	1		New Haven, Conn.....	1	
Buffalo, N. Y.....	3		New Orleans, La.....	9	1
Cambridge, Pa.....	1		New York, N. Y.....	18	1
Charleston, S. C.....	1		Norfolk, Va.....	1	1
Chicago, Ill.....	9	2	Passaic, N. J.....	1	
Cincinnati, Ohio.....	3		Philadelphia, Pa.....	7	
Cleveland, Ohio.....	2	1	Pittsburgh, Pa.....	5	
Columbus, Ohio.....	3		Plainfield, N. J.....	1	
Dayton, Ohio.....		1	Providence, R. I.....		1
Detroit, Mich.....	5	2	Richmond, Va.....	3	
El Paso, Tex.....		1	St. Louis, Mo.....	5	3
Erie, Pa.....	2		San Francisco, Cal.....	8	2
Everett, Wash.....	1		Seattle, Wash.....		1
Fall River, Mass.....	3		Toledo, Ohio.....	20	
Grand Rapids, Mich.....	10	2	Trenton, N. J.....	1	
Johnstown, Pa.....	9		Waltham, Mass.....	1	
Kalamazoo, Mich.....	1		Washington, D. C.....	4	1
Key West, Fla.....	4		Wilkinsburg, Pa.....	1	
Lexington, Ky.....		1	Worcester, Mass.....	1	1
Los Angeles, Cal.....	4		Zanesville, Ohio.....	2	
Lowell, Mass.....	1	1			

TYPHUS FEVER.

City Reports for Week Ended May 22, 1915.

During the week ended May 22, 1915, typhus fever was notified in cities as follows: Lawrence, Mass., 2 cases; Newport, Ky., 1 case and 1 death; Rochester, N. Y., 2 cases.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for April, 1915.

States.	Cases reported.			States.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Arkansas.....	18	136	8	Mississippi.....	31	486	22
Hawaii.....	16	10	2	Oregon.....	34	30	24
Kansas.....	79	1,770	83				

Oregon—Miscellaneous Reports.

Months.	Cases reported.			Months.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
September.....	21	29	21	February.....	41	7	41
November.....	75	23	37	March.....	30	19	58

City Reports for Week Ended May 22, 1915.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.....	579,590	170	16	1	65	1	23	.....	38	23
Boston, Mass.....	733,802	234	64	7	205	1	105	5	51	23
Chicago, Ill.....	2,393,325	648	114	13	1,206	16	65	2	278	79
Cleveland, Ohio.....	639,431	163	33	5	270	5	24	1	34	23
Detroit, Mich.....	537,650	156	18	2	9	.....	7	1	26	11
New York, N. Y.....	5,333,539	1,492	296	46	2,204	33	315	13	471	177
Philadelphia, Pa.....	1,657,810	448	60	3	881	11	24	1	113	61
Pittsburgh, Pa.....	564,878	157	25	5	191	1	26	3	28	15
St. Louis, Mo.....	734,667	193	36	1	318	2	10	1	40	22
From 300,000 to 500,000 inhab- itants:										
Buffalo, N. Y.....	454,112	121	15	1	92	.....	12	.....	26	17
Cincinnati, Ohio.....	402,175	126	23	.....	51	.....	7	.....	29	20
Los Angeles, Cal.....	438,914	122	14	1	285	.....	8	.....	38	19
Milwaukee, Wis.....	417,054	.....	11	3	15	.....	8	.....	22	14
New Orleans, La.....	361,221	153	24	1	10	.....	1	.....	34	21
San Francisco, Cal.....	448,502	149	28	6	14	.....	4	.....	24	17
Seattle, Wash.....	313,029	45	1	.....	10	.....	4	.....	12	2
Washington, D. C.....	353,378	112	4	.....	117	1	27	.....	26	15
From 200,000 to 300,000 inhab- itants:										
Columbus, Ohio.....	204,567	70	2	1	41	.....	8	.....	11	5
Jersey City, N. J.....	293,921	70	19	3	183	4	24	2	31	6
Portland, Ore.....	260,601	53	5	.....	10	.....	3	.....	2	10
Providence, R. I.....	245,090	73	8	.....	15	1	20	.....	7	7
Rochester, N. Y.....	241,518	55	.....	.....	28	1	11	.....	14	3
From 100,000 to 200,000 inhab- itants:										
Bridgeport, Conn.....	115,289	31	5	.....	19	.....	5	.....	3	3
Cambridge, Mass.....	110,357	26	8	.....	54	.....	17	.....	1	4
Camden, N. J.....	102,465	.....	6	.....	16	.....	.....	.....	8	.....
Dayton, Ohio.....	123,794	39	.....	.....	12	.....	10	.....	17	6
Fall River, Mass.....	125,443	38	.....	.....	9	.....	5	.....	11	3
Grand Rapids, Mich.....	123,227	33	2	.....	9	.....	.....	.....	7	4
Hartford, Conn.....	107,038	42	3	1	2	.....	6	.....	2	1
Lowell, Mass.....	111,004	38	1	1	6	.....	5	.....	10	2
Nashville, Tenn.....	114,899	38	.....	.....	.....	.....	.....	.....	3	2
New Bedford, Mass.....	111,230	27	1	.....	71	.....	2	.....	13	1
New Haven, Conn.....	144,505	9	9	.....	27	.....	16	.....	8	1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Con.

City Reports for Week Ended May 22, 1915—Continued.

Cities.	Population as of July 1, 1914, (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
From 100,000 to 200,000 inhabit- ants—Continued.											
Oakland, Cal.	183,002		5	1	3		1		1	2	
Reading, Pa.	103,361	33	1				20		2	2	
Richmond, Va.	134,917	56	1				2		6	4	
Springfield, Mass.	100,375	36	1	1	26	1	4		6	1	
Syracuse, N. Y.	149,353	43	6	1	80	2	1		5	5	
Tacoma, Wash.	103,418						2				
Toledo, Ohio.	184,126	56	2		32		2		17	5	
Trenton, N. J.	106,831	34	4		9		3		5	2	
Worcester, Mass.	157,732	47	3	1			3		4	4	
From 50,000 to 100,000 inhabi- tants:											
Akron, Ohio.	80,291		7		1		10			2	
Altoona, Pa.	56,553	13	1				2	1	1		
Atlantic City, N. J.	53,952	16			19						
Bayonne, N. J.	65,271	12	1				2	1	6		
Berkeley, Cal.	52,105	11			4						
Binghamton, N. Y.	52,191	14	2						1	1	
Brockton, Mass.	64,043	20			11		2		5	1	
Canton, Ohio.	57,426	11	1		15		4		1		
Charleston, S. C.	60,121									5	
Duluth, Minn.	89,331	27	1				11		1	7	
Erie, Pa.	72,401	17	4		2		1		5		
Evansville, Ind.	71,284	16			1		3		3	4	
Harrisburg, Pa.	69,493	21	3	1			1			2	
Johnstown, Pa.	64,642	17	5							1	
Kansas City, Kans.	94,271		3		12		3		2	2	
Lawrence, Mass.	95,834	34	2		6		5	1	4	1	
Little Rock, Ark.	53,811	20	1		1				2		
Lynn, Mass.	98,207	23	2		4		1		7	3	
Manchester, N. H.	75,635	21			1						
Mobile, Ala.	55,573	28							2	5	
New Britain, Conn.	50,612		7						1		
Norfolk, Va.	86,540				7	1	1		1	1	
Passaic, N. J.	66,276	21	4		1		25			2	
Pawtucket, R. I.	56,901	16			4		3			1	
Rockford, Ill.	52,337	19	1				2				
Sacramento, Cal.	62,717	14	1						5	2	
Saginaw, Mich.	53,988	5	1		1				1	1	
Schenectady, N. Y.	90,503	16	1		8		4		2	2	
Somerville, Mass.	83,881	16	9		28		11		2	3	
South Bend, Ind.	65,114		1		11						
Springfield, Ill.	57,972	26	2		8		1			3	
Wilkes-Barre, Pa.	73,660	22	6		16		2		5	1	
From 25,000 to 50,000 inhabi- tants:											
Alameda, Cal.	26,330	8			3				2	1	
Auburn, N. Y.	36,509	11					3				
Aurora, Ill.	33,022	9	1		9					2	
Brookline, Mass.	31,138	5			2		1				
Butte, Mont.	41,781	23	1						4	6	
Chelsea, Mass.	32,452	9	1		14		1		2	1	
Chicopee, Mass.	28,057	5			2		3		1	1	
Danville, Ill.	30,847	8			1		1			1	
Davenport, Iowa.	46,340						1				
Dubuque, Iowa.	39,428									2	
East Orange, N. J.	39,852		3		2		1		1		
Elgin, Ill.	27,485	4					3		2		
Elmira, N. Y.	37,816		1		54					1	
El Paso, Tex.	49,505	56	9		4		2			13	
Everett, Mass.	37,381	6	1		19		3			1	
Everett, Wash.	32,048	6			1				1		
Fitchburg, Mass.	40,507	10	4				4		3		
Galveston, Tex.	40,289		2				1			2	
Green Bay, Wis.	28,026		2				1				
Haverhill, Mass.	47,071	15		1	16		2		6		
Kalamazoo, Mich.	45,842	11							4	2	
Kenosha, Wis.	26,062	4			3				2		
Knoxville, Tenn.	37,924		1								
La Crosse, Wis.	31,367				2					1	
Lancaster, Pa.	49,685								1		
Lexington, Ky.	38,819	11			17		1		5	1	
Lima, Ohio.	33,904	5									

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Con.

City Reports for Week Ended May 22, 1915—Continued.

Cities.	Population as of July 1, 1914 (esti- mated by United States Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
From 25,000 to 50,000 inhabit- ants—Continued.											
Lincoln, Nebr.	45,643	11	2	1	28		3				
Lorain, Ohio	34,360		1		4		2		1		
Lynchburg, Va.	31,830	13							1		
Madison, Wis.	29,469	8			1		1				
Malden, Mass.	48,979	10	9		25		2	1	3		
Medford, Mass.	25,240	6	1		8		3				
New Castle, Pa.	39,569		2				1				
Newport, Ky.	31,517	10							3		
Newport, R. I.	29,154	3							2		
Newton, Mass.	42,455	10	1		3		11		1		
Niagara Falls, N. Y.	35,127	10							1		
Norristown, Pa.	30,265	6									
Orange, N. J.	31,968	10	1		1				2		
Pasadena, Cal.	40,880	8			19						
Perth Amboy, N. J.	38,265		3		8				1		
Pittsfield, Mass.	36,531	11			6				2		
Racine, Wis.	44,528	8	1		23						
Rock Island, Ill.	26,945	7			6						
San Diego, Cal.	48,900		1		1		1		3		
Steubenville, Ohio	25,817	9		1							
Stockton, Cal.	25,702		2		1		1				
Superior, Wis.	44,344	5					3				
Taunton, Mass.	35,631	5					1		3		
Waltham, Mass.	29,688	5			29		3		2		
West Hoboken, N. J.	40,647	7	5		8				1		
Wheeling, W. Va.	42,817	14	1				5		1		
Williamsport, Pa.	33,181	10	9	1	3		2				
Wilmington, N. C.	27,781	11							2		
Zanesville, Ohio	29,949		1		1						
Less than 25,000 inhabitants:											
Ann Arbor, Mich.	14,948	6	3						5		
Biddeford, Me.	17,475	2									
Cairo, Ill.	15,392	5									
Clinton, Mass.	13,075	2							4		
Concord, N. H.	22,291	4					2				
Cumberland, Md.	23,816	8					3	1	4		
Galesburg, Ill.	23,570	6									
Harrison, N. J.	16,160								4		
Kearney, N. J.	21,967	4									
Key West, Fla.	21,150	4									
Kokomo, Ind.	19,694	3			14						
Marinette, Wis.	14,610	3									
Melrose, Mass.	16,887	5	2		3		13		1		
Montclair, N. J.	24,782	4	1				1		1		
Morristown, N. J.	13,033	3	1				1		1		
Muscatine, Iowa	17,074	1					1				
Nanticoke, Pa.	21,756	5			6						
Newburyport, Mass.	15,147	6									
New London, Conn.	20,557	10	1						1	1	
North Adams, Mass.	22,019	5							1		
Northampton, Mass.	19,766	8			3		3		2		
Phoenix, Ariz.	16,870	4					2			2	
Plainfield, N. J.	22,755	4			5				1		
Rutland, Vt.	14,417	4	2								
Saratoga Springs, N. Y.	12,813	6			29				2	1	
Steelton, Pa.	15,126	1									
Wilkinsburg, Pa.	21,701	5			2		1		4	1	
Woburn, Mass.	15,755	1									

FOREIGN REPORTS.

EGYPT.

Plague.

Plague has been notified in Egypt as follows: Assiout Province, April 24 to 29, 1915, 7 cases with 1 death; Fayoum Province, April 23 to 29, 6 cases with 4 deaths; Minieh Province, April 28, 2 cases. Two of the cases notified were pneumonic.

JAPAN.

Plague—Tokyo.

Four fatal cases of plague were notified at Tokyo during the week ended June 6, 1915.

Communicable Diseases.

Communicable diseases have been notified in Japan exclusive of the island of Taiwan as follows:

Diseases.	March, 1915.		Total from Jan. 1 to Mar. 31, 1915.	
	Cases.	Deaths.	Cases.	Deaths.
Diphtheria.....	2,330	575	6,900	1,812
Dysentery.....	96	23	269	84
Paratyphoid fever.....	123	21	438	54
Scarlet fever.....	140	12	345	26
Smallpox.....	15	.....	14	1
Typhoid fever.....	1,006	251	4,083	906
Typhus fever.....	59	8	94	14

¹ Nagasaki-ken, 4 cases; Hokkai-do, 1 case.

² Akita-ken, 1 case; Aomori-ken, 16 cases, with 4 deaths; Hokkai-do, 2 cases with 1 death; Iwate-ken, 2 cases; Miyagi-ken, 27 cases, with 1 death; Yamagata-ken, 11 cases, with 2 deaths.

TURKEY IN ASIA.

Dengue—Vicinity of Tripoli.

An epidemic of dengue was reported present in villages in vicinity of Tripoli, April 27, 1915.

TYPHUS FEVER.

Reports Received During Week Ended June 11, 1915.¹

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....	Apr. 11-17.....	489		
Hungary—				
Budapest.....	Apr. 25-May 1....	7	4	Military.
Fiume.....	May 3-9.....	1		
China:				
Harbin.....	Mar. 22-Apr. 11...	4		
Manchuria Station.....	Mar. 15-21.....	1		Eastern Chinese Railway.
Dutch East Indies:				
Java—				
Batavia.....	Apr. 11-17.....	17	3	Present in surrounding country.
Egypt:				
Alexandria.....	Apr. 23-May 6....	40	10	
Cairo.....	Apr. 9-29.....	30	68	
Port Said.....	Apr. 16-22.....	4	1	
Germany.....	Apr. 23-May 1....	12		Among soldiers. Present among Russian prisoners in camps in 10 districts and Saxony.
Greece:				
Athens.....	May 5-11.....	1	1	
Saloniki.....	Apr. 25-May 1....		1	
Japan:				
Yokohama.....	May 4-10.....	8		
Russia:				
Petrograd.....	Apr. 10-17.....	2		
Turkey in Asia:				
Adana.....	Mar. 28-Apr. 3....			Still present.
Beirut.....	Mar. 28-Apr. 10...	4	1	
Jaffa.....	Apr. 3-17.....	17	7	
Tarsus.....	Mar. 28-Apr. 3....			Still present.

Reports Received from Jan. 1 to June 4, 1915.

Austria-Hungary.....	Aug.-Dec. 31, 1914.	279		
Do.....	Jan. 1-Mar. 27....	4,374		
Vienna.....	Apr. 4-17.....	14		
Azores:				
Terceira.....	Jan. 31-Feb. 6....			Present.
Bermuda:				
Warwick Camp.....	Mar. 14-20.....	1		Among troops.
China:				
Antung.....	Feb. 1-7.....		1	
Hankow.....	Mar. 21-27.....	1		On steamship from Shanghai.
Harbin.....	Jan. 25-Feb. 7....	1		
Tientsin.....	Jan. 23-30.....			Present.
Dutch East Indies:				
Java—				
Batavia.....	Dec. 19-26.....	5		Among foreigners.
Do.....	Mar. 14-Apr. 10...	32	5	Present in surrounding country.
Egypt:				
Alexandria.....	Dec. 25-31.....	2		Jan. 15-21: Present.
Do.....	Feb. 12-Apr. 22...	178	25	
Cairo.....	Dec. 23.....		3	Jan. 8-14: Present.
Do.....	Jan. 21-Apr. 8....		102	
Port Said.....	Mar. 5-11.....		1	Feb. 11-18: Present.
Germany.....	Feb. 14-Apr. 24...	167		Among German soldiers. Present among Russian prisoners of war in camps in 11 Government districts and in Saxony and other divisions of the Empire.
Great Britain and Ireland:				
Dublin.....	Feb. 7-20.....	6		
Do.....	Mar. 28-Apr. 3....		1	
Dundee.....	May 2-8.....	3		
Glasgow.....	Mar. 11-18.....	2		
Do.....	May 6-12.....	1		
Greece:				
Athens.....	Apr. 12-18.....			Present.
Do.....	Apr. 19-25.....		1	
Saloniki.....	Dec. 20-23.....	5	5	
Do.....	Dec. 27-Jan. 2....		5	Jan. 17-23: Present.
Do.....	Feb. 6.....	1		From Belgrade.
Do.....	Feb. 21-Mar. 7....		6	
Do.....	Apr. 3-17.....		4	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

TYPHUS FEVER—Continued.**Reports Received from Jan. 1 to June 4, 1915—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Guatemala:				
Guatemala City.....	Mar. 21-27.....			Present.
Italy:				
Florence.....	Nov. 1-30.....	17	2	
Do.....	Dec. 1-31.....	2		
Do.....	Jan. 1-31.....	4		
Do.....	Feb. 1-28.....	3	3	
Do.....	Mar. 1-31.....	4	3	
Venice.....	Jan. 2-9.....	8	1	
Japan:				
Hakodate.....	Feb. 1-Apr. 3.....	15	3	Mar. 6: Still present.
Tokyo.....	Apr. 13-26.....	18		
Yokohama.....	Apr. 27-May 3.....	7		
Mexico:				
Aguascalientes.....	Jan. 17-23.....			Present.
Do.....	Mar. 1-7.....			Do.
Do.....	May 3-16.....		4	
Netherlands:				
Flushing.....	May 1-8.....	1		
Russia:				
Moscow.....	Jan. 2-Feb. 20.....	64	6	
Do.....	Feb. 21-Apr. 4.....	799	74	
Odessa.....	Feb. 21-Mar. 6.....	6		
Petrograd.....	Dec. 19-26.....	8	2	
Do.....	Dec. 25-Apr. 10.....	63	11	
Vladivostok.....	Dec. 20-28.....	5	1	
Do.....	Jan. 14-Mar. 8.....	3	3	
Servia:	Feb. 6.....			Epidemic. About 500 deaths daily.
Spain:				
Madrid.....	Mar. 1-31.....	5	5	
Switzerland:				
Zurich.....	Apr. 25-May 1.....	1		
Turkey in Asia:				
Adana.....	Apr. 4-24.....			Present.
Erzeroum.....	Apr. 10.....			Military center. Epidemic.
Erzinjan.....	do.....			Do.
Harput.....	Feb. 1-27.....			Present.
Do.....	Mar. 1-31.....			Do.
Jaffa.....	Jan. 31-Feb. 6.....			Do.
Do.....	Mar. 28-Apr. 3.....	6		Do.
Mersina.....	Mar. 7-13.....			Do.
Samsoun.....	Mar. 4.....			Present in military hospital.
Tarsus.....	Apr. 4-24.....			Present.
Trebizond.....	Dec. 13-Feb. 27.....			Many cases among troops, with high fatality rate.
Do.....	Apr. 10.....			Epidemic.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.**Reports Received During Week Ended June 11, 1915.¹****CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Bosnia-Herzegovina.....	Apr. 4-10.....	21		
Dutch East Indies:				
Java—				
Batavia.....	Apr. 11-17.....	16	15	
India:				
Madras.....	Apr. 4-10.....	2		
Rangoon.....	Apr. 4-17.....	3	2	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended June 11, 1915—Continued.****PLAGUE.**

Places.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo.....	Mar. 28-Apr. 10....	2	2	
China:				
Amoy.....	Mar. 28-Apr. 3.....			Present. Also present in several cities and villages in vicinity.
Changechow.....	do.....			Present.
Dutch East Indies:				
Java.....	Mar. 13-25.....	326	295	East Java.
Egypt:				
Assiout, province.....	Apr. 24-29.....	7	1	
Fayoum, province.....	Apr. 23-29.....	6	4	
Minieh, province.....	Apr. 28.....	2		
India:				
Bombay.....	Apr. 11-17.....	45	34	
Karachi.....	Apr. 8-14.....	66	47	
Rangoon.....	Mar. 27-Apr. 17....	41	41	
Japan:				
Tokyo.....	May 31-June 6....	4	4	
Turkey in Asia:				
Bagdad.....	Apr. 5-17.....	151	121	

SMALLPOX.

Australia:				
New South Wales—				
Weston.....	Apr. 16-22.....	1		
Queensland—				
Thursday Island.....	Mar. 8.....	2		From steamship Chanda from Calcutta.
Victoria—				
Melbourne.....	Mar. 5.....	1		From steamship Gregory Apcar from Calcutta.
Do.....	Mar. 13.....	1	1	From steamship transport H2 from Calcutta.
Western Australia—				
Fremantle.....	Mar. 5.....	3		From steamship Umballa from Bombay.
Austria-Hungary:				
Austria.....	Apr. 12-17.....	180		
Vienna.....	do.....	59		Aug., 1914-Apr. 17, 1915: Cases, 1,360; deaths, 281.
Hungary—				
Budapest.....	Apr. 25-May 1....	27		
Brazil:				
Rio de Janeiro.....	Apr. 11-17.....	7	2	
Canada:				
Ontario—				
Fort William.....	May 16-22.....	1		From vessel.
Toronto.....	do.....	5		
Ceylon:				
Colombo.....	Mar. 28-Apr. 10....	10	6	
China:				
Foochow.....	Apr. 18-24.....			Present.
Harbin.....	Mar. 15-21.....	1		
Shanghai.....	Apr. 11-17.....	2	6	Deaths among natives.
Dutch East Indies:				
Java.....	do.....	136	20	West Java.
Batavia.....	do.....	29	4	
Egypt:				
Alexandria.....	Apr. 23-May 6....	12	5	
Cairo.....	Apr. 9-29.....	7	2	
Germany.....				Apr. 25-May 1, 1915: Cases, 4.
Districts—				
Bromberg.....	Apr. 25-May 1....	1		
Marienwerder.....	do.....	1		
Schaumburg-Lippe.....	do.....	1		
Stettin.....	do.....	1		
Great Britain:				
Bradford.....	May 9-15.....	2		
India:				
Bombay.....	Apr. 11-17.....	19	15	
Karachi.....	Apr. 8-14.....	3	1	
Madras.....	Apr. 4-17.....	17	3	
Rangoon.....	Mar. 21-Apr. 17....	65	9	
Italy:				
Milan.....	Mar. 1-31.....	2		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended June 11, 1915—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Frontera.....	May 9-15.....	6	1	
Mazatlan.....	Apr. 28-May 4.....	2	2	
Progreso.....	May 9-22.....	9	1	
Vera Cruz.....	May 10-16.....	11	6	
Portugal:				
Lisbon.....	May 9-15.....	3	.....
Russia:				
Moscow.....	Apr. 5-18.....	27	3	
Petrograd.....	Apr. 10-17.....	44	10	
Spain:				
Valencia.....	Mar. 9-15.....	37	3	
Straits Settlements:				
Singapore.....	Mar. 28-Apr. 10..	2	.....
Switzerland:				
Basel.....	Apr. 25-May 1....	6	.....
Turkey in Asia:				
Beirut.....	Mar. 27-Apr. 10..	11	5	
Do.....	Apr. 25-May 1....	3	.....
Jaffa.....	Apr. 3-10.....	1	.....
Tripoli.....	Apr. 18-24.....	15	3	
At sea:				
S. S. Chanda from Calcutta via Thursday Island.	Mar. 14.....	1	1	En route to Sydney.

Reports Received from Dec. 26, 1914, to June 4, 1915.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....	Mar. 21-Apr. 10..	3	.....	Total Sept. 15-Dec. 5: Cases, 3,467; deaths, 937. Total Jan. 4-Mar. 20: 151 cases.
Do.....	.....	.....	.....	Total Nov. 18-Dec. 22: Cases, 741; deaths, 133.
Bohemia.....	.....	.....	.....	Total Sept. 23-Dec. 5: Cases, 178; deaths, 56.
Coast land—				
Trieste.....	Nov. 15-21.....	5	.....
Galicia.....	.....	.....	.....	Total Sept. 23-Dec. 5: Cases, 2,047; deaths, 793.
Kracow.....	Oct. 4-Dec. 5.....	109	4	
Liskow.....	Sept. 23-Apr. 7...	355	186	
Przemysl.....	Nov. 1-14.....	132	3	
Lower Austria.....	.....	.....	.....	Total Sept. 1-Dec. 5: Cases, 473; deaths, 67.
Vienna.....	Sept. 1-Jan. 30...	390	42	
Do.....	Mar. 7-Apr. 3.....	2	.....
Moravia.....	.....	.....	.....	Total Sept. 15-Dec. 5: Cases, 362; deaths, 93.
Brunn.....	Sept. 15-Nov. 21..	18	3	Total Sept. 23-Dec. 5: Cases, 288; deaths, 39.
Silesia.....	.....	.....	.....	Sept. 23-28: Cases, 55; deaths, 13.
Styria.....	.....	.....	.....
Gratz.....	Oct. 3-Nov. 14....	10	.....
Upper Austria.....	Oct. 4-Nov. 7.....	3	.....
Bosnia-Herzegovina.....	Jan. 4-Apr. 3.....	151	69	Total Oct. 4-10: Case, 1.
Croatia-Slavonia.....	Dec. 31-Apr. 5.....	489	163	Total Oct. 4-10: Case, 1; death, 1.
Esseg, city.....	Mar. 9-15.....	4	.....
Hungary.....	Dec. 31-Apr. 4.....	578	164	Total Sept. 15-Nov. 30: Cases, 3,042; deaths not yet reported.
Do.....	.....	.....	.....	Total Nov. 18-Dec. 22: Cases, 452; deaths not reported.
Budapest.....	Dec. 25-Feb. 13..	22	4	
Fiume.....	Jan. 25-Feb. 7.....	3	1	
Balkan Territory.....	Mar. 22-Apr. 4.....	6	1	In scene of war.
Borneo:				
Membakut estate.....	Mar. 2-31.....	6	4	West coast.
Simporna.....	Jan. 1-Feb. 8.....	60	53	Mar. 13, still present.
Do.....	Mar. 2-19.....	.....	14	
Ceylon:				
Colombo.....	Sept. 5.....	1	1	
China:				
Nanking.....	Nov. 15-21.....	.....	.....	Present.
Wuchow.....	Nov. 27.....	.....	.....	Do.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.****CHOLERA—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Banca—				
Muntok.....	Dec. 6-12.....	11	7	
Celebes—				
Menado.....	Oct. 18-Dec. 5....	425	409	
Java—				
Batavia.....	Oct. 25-Dec. 26....	361	343	May 4, epidemic,
Do.....	Mar. 14-Apr. 10....	10	7	
Sumatra—				
Lamongan.....	Nov. 8-1.....	27	7	
Mengals.....	Oct. 18-Nov. 7.....	65	69	
Palembang.....	Oct. 18-Dec. 19....	175	147	
Pencoulen district.....	Oct. 25-31.....	88	32	
Telok Betong.....	Nov. 14-Dec. 12....	47	44	
Germany:				
Do.....	Feb. 21-Mar. 3.....	17	1	Total, Nov. 8-Jan. 16; Cases, 54.
Brandenburg.....	Dec. 6-23.....	4	.....	In prison camps.
Torgau.....	Jan. 5-16.....	1	.....	Vicinity of Frankfort on the
Posen.....	Dec. 20-26.....	2	.....	Oder.
Zirka.....	Jan. 5-16.....	5	.....	At Birnbaum.
Silesia.....	Nov. 8-Dec. 26....	46	.....	In 23 localities.
Rosenberg.....	Jan. 5-16.....	1	.....
India:				
Bombay.....	Nov. 1-Apr. 10....	13	5	
Calcutta.....	Nov. 1-28.....	.....	42	Oct. 25-31: Deaths, 17. Not pre-
Do.....	Mar. 14-20.....	.....	124	viously reported.
Madras.....	Nov. 8-Apr. 3.....	180	130	
Madura district.....	Jan. 17-Mar. 6.....	622	403	
Rangoon.....	Sept. 1-Dec. 31....	6	5	
Do.....	Feb. 28-Mar. 6.....	1	1	
Indo-China:				
Anam—				
Binh-Dinh.....	Oct. 1-Nov. 30....	84	42	Jan. 4-Aug. 31: Cases, 259; deaths,
Cambodia—				148. Aug. 1-31: Cases, 18;
Pnum Penh.....	Aug. 1-Oct. 31....	2	1	deaths, 15.
Cochin China—				
Baria.....	Aug. 1-31.....	6	6	And vicinity, Nov. 3-23: Cases,
Cantho.....	Oct. 1-31.....	2	.....	20; deaths, 10.
Cholon.....	Aug. 1-Nov. 30....	70	49	Total Jan. 1-Dec. 30: Cases, 154;
Saigon.....	Aug. 1-Apr. 10....	923	492	deaths, 79.
Laos—				
Pakse.....	Aug. 1-31.....	1	1	
Tonkin—				
Ninh-Binh.....	Oct. 1-31.....	11	2	
Japan:				
Kyoto fu.....	Oct. 1-31.....	1	1	Total Jan. 1-Dec. 31: 5 cases, 4
Philippine Islands:				deaths.
Manila.....	Oct. 25-Jan. 30....	66	37	
Do.....	Feb. 7-Apr. 10....	38	23	
Russia:				
Moscow.....	Nov. 8-Jan. 23....	.....	4	
Siam:				
Bangkok.....	Sept. 27-Mar. 20....	.....	13	
Straits Settlements:				
Singapore.....	Oct. 4-Jan. 30....	5	5	

YELLOW FEVER.

Brazil:				
Bahia.....	Jan. 24-Feb. 20....	3	1	
Rio de Janeiro.....	Dec. 13-16.....	2	1	
Ecuador:				
Guayaquil.....	Nov. 1-Mar. 31....	5	3	
French Guiana:				
St. Jean du Maroni.....	Sept. 23-Oct. 10....	15	8	At the penal station.
Mexico:				
Merida.....	Jan. 25.....	1	1	
Do.....	Mar. 17.....	1	1	
Do.....	Apr. 10.....	2	.....	In children. Mild type.
Venezuela:				
Caracas.....	Dec. 31.....	1	.....

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.

PLAGUE.

Places.	Date.	Cases.	Deaths.	Remarks.
Bahrein (in Persian Gulf).....	Dec. 29.....	.....	.....	Present.
Brazil:				
Bahia.....	Nov. 16-Feb. 27....	20	16	
Do.....	Apr. 4-10.....	1	1	Mar. 21-27: Cases, 4; deaths, 2.
Pernambuco.....	Oct. 11-Dec. 31....	.....	12	
Rio de Janeiro.....	Dec. 20-Jan. 5.....	2	.....
Do.....	May 20.....	1	.....
Ceylon:				
Colombo.....	Oct. 25-Mar. 27....	63	63	
China:				
Canton.....	.....	.....	.....	June 12-July 12: Cases, 325.
Changchow.....	Apr. 6.....	.....	.....	Present.
Hongkong.....	Dec. 28-Apr. 10....	3	2	Chinese.
Shanghai.....	Dec. 6-Jan. 2.....	.....	3	Among natives.
Cuba:				
Guanabacoa.....	May 13.....	1	.....
Habana.....	Feb. 9-June 2.....	16	7	
Pinar del Rio.....	Apr. 9-10.....	2	1	
Dutch East Indies:				
Java.....	Jan. 29-Mar. 27....	951	846	East Java. Total, Oct. 1-Nov.
Kediri.....	Oct. 1-Nov. 30....	730	678	30: Cases, 2,562; deaths, 2,278.
Madiun.....	do.....	128	110	
Paseroean.....	do.....	1,405	1,211	
Surabaya.....	do.....	299	279	
Do.....	Dec. 13-Apr. 3....	193	184	
Ecuador:				
Duran.....	Nov. 1-Jan. 31....	10	4	
Guayaquil.....	Nov. 1-Mar. 31....	366	149	
Milagro.....	Dec. 1-31.....	1	1	
Sanborondon.....	Nov. 1-Dec. 31....	4	3	
Egypt:				
Alexandria.....	Nov. 5-28.....	1	1	Total, Jan. 1, 1914-Jan. 23, 1915:
Do.....	Apr. 9-15.....	2	.....	Cases, 225; deaths, 110.
Assiut, Province.....	Jan. 28-Apr. 22....	19	7	
Fayoum, Province.....	Apr. 14.....	1	1	
Gizeh, Province.....	Apr. 1-8.....	7	7	
Port Said.....	Oct. 22-Dec. 24....	9	7	Jan. 1-Dec. 18: Cases, 44.
Greece:				
Piræus.....	Jan. 17-27.....	1	.....	Sept. 12, present in Drama and
Saloniki.....	Apr. 4-10.....	5	7	Kavala.
India:				
Bassein.....	Jan. 4-Dec. 5.....	13	10	Not previously reported.
Bombay.....	Nov. 1-Apr. 10....	125	109	
Karachi.....	Nov. 8-Apr. 10....	80	65	
Madras.....	Nov. 22-Dec. 12....	6	6	
Madras Presidency.....	Jan. 17-30.....	299	211	
Do.....	Feb. 7-Mar. 6.....	445	323	
Rangoon.....	Sept. 1-Dec. 31....	125	117	
Do.....	Feb. 28-Mar. 27....	.....	63	Feb. 1-28, 1915: Cases, 54; deaths,
Indo-China.....				52.
Anam—				Jan. 1-Aug. 31: Cases, 1,780;
Phanitet.....	Aug. 1-31.....	4	1	deaths, 1,413. Aug. 1-3: Cases,
Do.....	Oct. 1-Nov. 30....	2	1	155; deaths, 121.
Phanrang.....	Aug. 1-Nov. 30....	12	10	
Cambodia.....				
Kompong-Speu.....	Nov. 1-30.....	5	3	
Pnum Penh.....	Aug. 1-Nov. 30....	68	84	
Stung-Treng.....	Oct. 1-Nov. 30....	4	3	
Cochin China—				
Cantho.....	Nov. 1-30.....	3	.....
Cholon.....	Aug. 1-Nov. 30....	39	14	
Giadinh.....	Oct. 1-31.....	1	.....
Saigon.....	Aug. 1-31.....	23	15	And vicinity Nov. 3-30: Cases, 5.
Do.....	Jan. 4-Apr. 10....	42	19	
Thudaumot.....	Nov. 1-30.....	2	1	
Kouang-Tcheou-Wan.....	Aug. 1-Nov. 30....	70	70	
Tonkin—				
Tong-San.....	Nov. 1-30.....	25	25	
Japan.....				Total, Jan. 1-Dec. 31: 495 cases;
Chiba-ken—				110 deaths.
Komikawa.....	Jan. 1-Dec. 31, 1914	6	6	
Moriyama.....	do.....	5	4	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Japan—Continued.				
Ibaraki-ken—				
Isohama.....	Jan. 1-Dec. 31, 1914	1	1	
Kagi.....	Jan. 24-Apr. 24....	59	41	
Kanagawa-ken—				
Hodogaya.....	Jan. 24-Feb. 13....	8	6	Including reports previously published in P. H. R.
Kawasaki.....	do.....	1	1	
Ohno-mura.....	do.....	9	8	
Tijima-mura.....	do.....	5	4	
Yokohama.....	do.....	1	1	
Taiwan (Formosa).....	do.....	303	275	Do.
Tokyo-fu.....	do.....	47	29	Do.
Tokyo.....	Dec. 29-Jan. 4....	1	1	
Libya (Tripoli).....				Present in Derna and Marsa-Susa among native laborers.
Mauritius.....	Nov. 6-Jan. 14....	74		
Persia:				
Belessavar.....	Oct. 30-Nov. 9....	50	80	On Caspian coast.
Kasri Shireen.....	Dec. 12.....	1		
Peru:				
Departments—				
Ancachs.....				Total year 1914: Cases, 34; deaths, 20.
Arequipa.....				Total year 1914: Cases, 54; deaths, 24.
Cajamarca.....				Total year 1914: Cases, 16; deaths, 7.
Callao.....				Total year 1914: Cases, 14; deaths, 8.
La Libertad.....				Total year 1914: Cases, 335; deaths, 176.
Lambayeque.....				Total year 1914: Cases, 1,907; deaths, 47.
Lima.....				Total year 1914: Cases, 106; deaths, 48.
Piura.....				Total year 1914: Cases, 94; deaths, 56.
Barranco.....	Mar. 1-Apr. 4....	1		
Callao.....	Nov. 16-Apr. 4....	13	2	
Catacoas.....	do.....	25	3	
Chiclayo.....	do.....	6	15	
Chocope.....	Nov. 16-Jan. 3....			Present.
Cocerachaca.....	Mar. 1-Apr. 4....	1		
Perruñate.....	Nov. 16-Jan. 31....	1		
Guadalupe.....	Jan. 4-31.....	1	1	
Huancayo.....	do.....	1	1	
Lambayeque.....	Nov. 16-Apr. 11....	18	5	
Lima (city).....	do.....	20	2	
Lima (country).....	Nov. 16-Apr. 4....	10	1	
Lurigancho.....	Mar. 1-Apr. 4....	1		
Lurin.....	do.....	1		
Mollendo.....	Nov. 16-Apr. 4....	24		
Pacasmayo.....	Nov. 16-Jan. 3....	1		
Piura.....	Nov. 16-Apr. 4....	23	7	
Salaverry.....	Nov. 16-Apr. 25....	7	3	
San Pedro.....	Nov. 16-Apr. 11....	26		
Trujillo.....	Nov. 16-Apr. 4....	57	8	
Russia:				
Moscow.....	Dec. 6-Feb. 13....	9	2	
Senegal:				
Dakar.....	Dec. 5.....			Do.
Siam:				
Bangkok.....	Dec. 26-Mar. 20....		14	
Straits Settlements:				
Singapore.....	Nov. 1-Mar. 27....	29	22	
Turkey in Asia:				
Bagdad.....	Nov. 1-Dec. 3....	11	9	
Do.....	Dec. 26-Jan. 5....	12	8	
Do.....	Jan. 12-Apr. 4....	381	234	
Union of South Africa:				
Cape Province—				
Cradock district.....	Mar. 30-Apr. 5....	7	1	
Queenstown district.....	Feb. 5-Apr. 10....	13	8	
Zanzibar.....	Oct. 25-31.....	2	3	

Corrected statement: To Mar. 29, cases, 28; deaths, 18.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.****SMALLPOX.**

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	Nov. 5-14.....	49	51	Present.
Muttra.....	Feb. 7-13.....			
Argentina:				
Rosario.....	Oct. 1-31.....		1	
Australia:				
New South Wales—				
Aberdare.....	Mar. 19-25.....	2		Total, Nov. 13-19: Cases, 7 in the metropolitan area and 2 in the country districts.
Cessnock.....	Mar. 5-Apr. 15.....	8		
Newcastle.....	Jan. 22-28.....	2		
Penrith.....	Dec. 11-17.....	1		
Sydney.....	Dec. 11-Mar. 25.....	40		
Queensland—				
Brisbane.....				Nov. 19, in Colmslie quarantine station, 1 case from s. s. Kano Na from Melbourne, via Sydney.
South Australia.....	Jan. 3-16.....	1		Total, Feb. 23-Mar. 6, 292 cases.
Austria-Hungary:				
Austria.....	Mar. 28-Apr. 3.....	153		
Prague.....	Jan. 17-23.....	1		
Vienna.....	Oct. 31-Jan. 9.....	141	15	
Do.....	Jan. 17-Apr. 24.....	902	221	
Hungary—				
Budapest.....	Jan. 31-Apr. 17.....	303		
Fiume.....	Dec. 6-Apr. 25.....	8	2	
Belgium:				
Antwerp.....	Mar. 23-29.....	1		
Brazil:				
Pernambuco.....	Oct. 1-Dec. 31.....		57	
Do.....	Jan. 18-31.....		4	
Rio de Janeiro.....	Nov. 1-Jan. 9.....	735	215	
Do.....	Feb. 7-Apr. 10.....	87	30	
Sao Paulo.....	Nov. 9-15.....	2		
British Honduras:				
Belize.....	Apr. 16-22.....	1		Isolated 3 miles from Belize.
Bulgaria:				
Sofia.....	June 30-Nov. 28.....	121		
Canada:				
Alberta—				
Calgary.....	Apr. 10-17.....	1		
British Columbia—				
Vancouver.....	Feb. 8-Mar. 20.....	4		
Manitoba—				
Winnipeg.....	Jan. 24-May 15.....	15		
Ontario—				
Hamilton.....	Jan. 1-Apr. 30.....	9		
Sarnia.....	Dec. 13-Mar. 13.....	6		
Toronto.....	Dec. 6-May 15.....	64	1	
Windsor.....	Jan. 17-May 1.....	5		Jan. 13: Cases, 4 from Grand Trunk ferryboat Landsdown.
Quebec—				
Montreal.....	Dec. 28-May 15.....	22		
Quebec.....	Dec. 13-Jan. 16.....	5		
Canary Islands:				
Teneriffe—				
Santa Cruz.....	Dec. 6-26.....		2	
Ceylon:				
Colombo.....	Oct. 25-Mar. 27.....	201	58	Jan. 14, 1 case from steamship Knight Templar; fatal. Feb. 6, 1 case from steamship Chindwara.
China:				
Foochow.....	Mar. 6-Apr. 10.....			Present.
Hankow.....	Feb. 7-13.....	1		
Harbin.....	Jan. 11-Mar. 14.....	17		
Hongkong.....	Nov. 22-Apr. 3.....	17	14	
Nanking.....				Feb. 20, present. Mar. 21-Apr. 24, present.
Newchwang.....				Present.
Shanghai.....	Nov. 9-Apr. 24.....	50	125	Deaths among natives.
Tientsin.....	Dec. 6-12.....		1	
Do.....	Mar. 7-13.....		1	
Cuba:				
Guayos.....	Jan. 12-Feb. 10.....	7	1	
Habana.....	Mar. 8-21.....	1	1	Mar. 15: 1 case on steamship Morro Castle.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

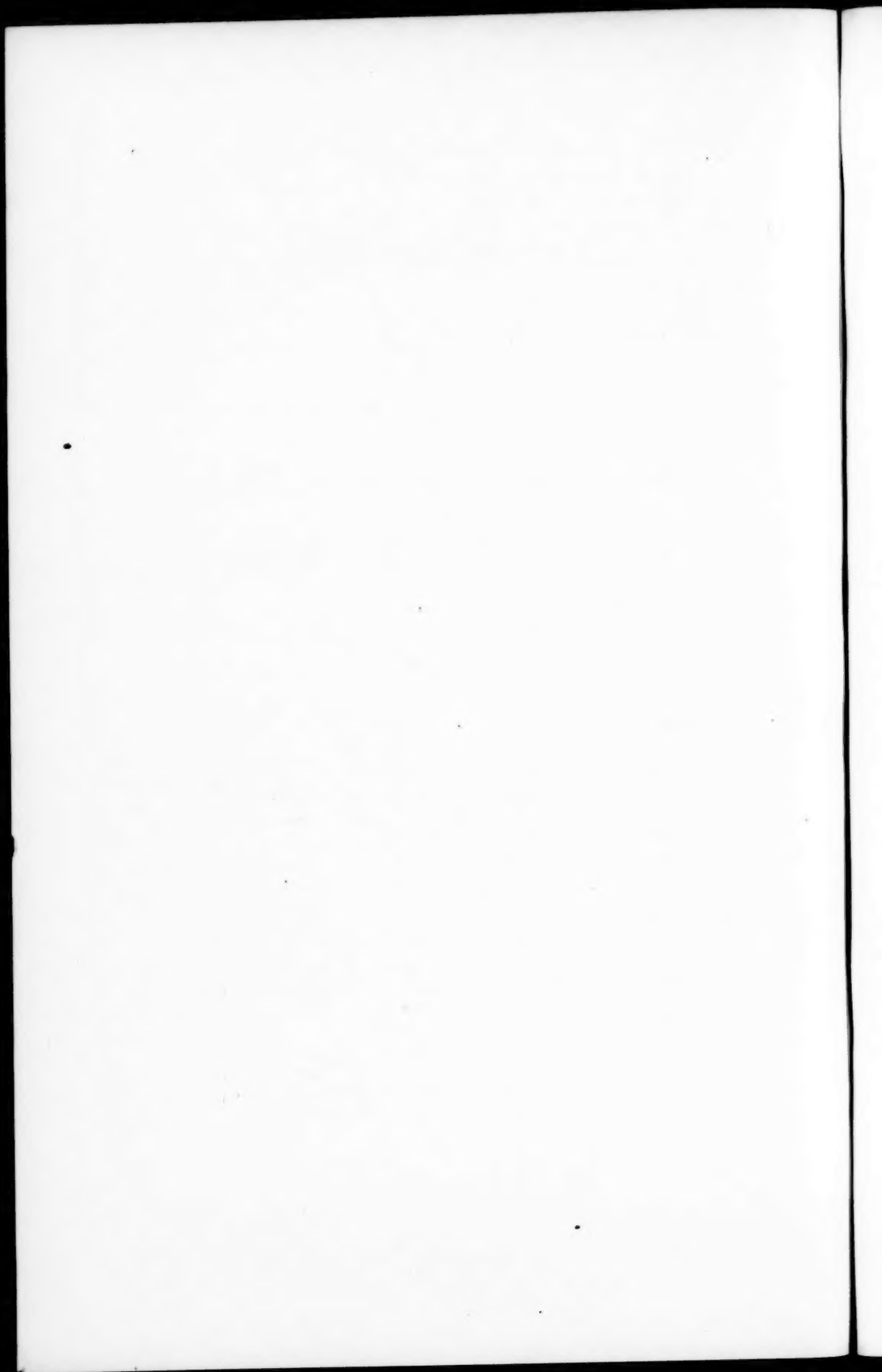
Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Borneo.....	Nov. 8-14.....	50	30	Oct. 18-24: Cases, 112; deaths, 44, mainly in Pontianak.
Java.....	Jan. 8-Mar. 6.....	586	208	In the western part, including
Do.....	Mar. 28-Apr. 3.....	123	31	Batavia, Feb. 18-Mar. 20:
Batavia.....	Oct. 18-Nov. 21.....	166	44	Cases, 155; deaths, 45.
Do.....	Jan. 8-Apr. 10.....	120	41	
Surabaya.....	Nov. 1-7.....	1		
Sumatra—				
Tepanodi district.....	Dec. 5-20.....	6	2	
Egypt:				
Alexandria.....	Nov. 19-Apr. 22.....	115	29	
Cairo.....	Dec. 3-Apr. 8.....	43	7	
France:				
Havre.....	Dec. 20-26.....	1		
Marseille.....	Jan. 1-Mar. 31.....		2	
Nantes.....	Apr. 30-May 6.....	2		
Paris.....	Nov. 15-Dec. 26.....	4	2	
Do.....	Mar. 20-27.....	1		
Roubaix.....	Jan. 1-31.....		27	
Germany.....	Apr. 11-24.....	7		Nov. 15-Dec. 10: Cases 14. Jan.
Strassburg.....	Jan. 1-Feb. 28.....	10	1	10-16: 11 cases.
Great Britain:				
Cardiff.....	Nov. 30-Dec. 5.....	5		
Leeds.....	Apr. 25-May 1.....	1		
Liverpool.....	Dec. 19.....	1		
London.....	Jan. 31-Apr. 10.....	28	3	
South Shields.....	Apr. 18-21.....	1		
Greece:				
Kavala.....	Nov. 22-Mar. 27.....	11		
Kilkish.....	Nov. 22-Feb. 27.....	1		
Patras.....	Nov. 23-Feb. 21.....		18	Jan. 31; Epidemic.
Saloniki.....	Nov. 13-Apr. 10.....	86	64	
Guatemala:				
Guatemala.....	Mar. 21-Apr. 5.....			Present.
India:				
Bombay.....	Nov. 1-Apr. 3.....	334	111	
Calcutta.....	Oct. 25-Nov. 28.....		37	
Do.....	Mar. 14-20.....		291	Epidemic.
Karachi.....	Jan. 3-Apr. 10.....	11	3	
Madras.....	Nov. 1-Apr. 3.....	94	13	
Rangoon.....	Oct. 1-Dec. 31.....	3	3	
Do.....	Jan. 1-Apr. 3.....	81	11	Feb. 1-28: Cases, 16; deaths, 6.
Indo-China:				
Anam—				
Binh-Dinh.....	Oct. 1-31.....	3		
Phanrang.....	Nov. 1-30.....		1	
Cambodia—				
Pnompenh.....	Oct. 1-Nov. 30.....	2	1	
Cochin China—				
Bac-Lien.....	Nov. 1-30.....	1		
Saigon.....	Feb. 22-Apr. 3.....	18	11	
Laos—				
Pakse.....	Feb. 22-Mar. 27.....	1		
Tonkin—				
Haiduong.....	do.....	4		
Haiphong.....	Oct. 1-Nov. 30.....	13	1	
Hanoi.....	Nov. 1-30.....	1		
Italy:				
Milan.....	Dec. 1-31.....	1		
Turin.....	Dec. 21-Mar. 21.....	1		
Japan.....				Jan. 1-Dec. 31: Cases, 485; deaths,
Kagi.....	Jan. 31-Feb. 6.....	3	3	110, exclusive of Taiwan.
Nagasaki.....	Jan. 18-Mar. 14.....	4	1	
Nagasaki-ken.....	Oct. 1-Dec. 31.....	60	12	
Taiwan.....	Oct. 25-Apr. 21.....	75	28	
Mexico:				
Aguascalientes.....	Dec. 7-May 16.....		29	
Chihuahua.....	Nov. 30-Apr. 9.....	29	19	
Frontera.....	May 17-24.....			Present.
Juarez.....	Dec. 4.....			Prevalent.
Mazatlan.....	Dec. 9-Apr. 13.....	66	42	
Mexicali.....	Feb. 14-20.....	3		
Monterey.....	Dec. 14-May 2.....	92	2	Feb. 10: Epidemic.
Nuevo Laredo.....	Jan. 31-Apr. 10.....	5	5	To May 13: Cases, 17.
Progreso.....	Apr. 4-May 8.....	35	14	
Salina Cruz.....	Nov. 1-7.....	1		
San Juan Bautista.....	May 8.....			Present among troops.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received from Dec. 26, 1914, to June 4, 1915—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Mexico—Continued.				
Tampico.....	Dec. 1-May 10.....		49	Prevalent among the military. Recent epidemic; 303 cases estimated.
Tuxpan.....	Apr. 29.....			
Vera Cruz.....	Dec. 1-May 9.....	223	49	
Netherlands:				
Rotterdam.....	Jan. 24-Mar. 6.....	5	1	
Newfoundland:				
St. Johns.....	Jan. 23-29.....	1		
Norway:				
Christiansand.....	Nov. 1-30.....	7	2	Including report, vol. 23.
Stavanger.....	Nov. 30-Dec. 5.....	1		
Persia:				
Teheran.....	Feb. 14-20.....			Present.
Peru:				
Arequipa.....	Feb. 28.....			Epidemic.
Philippine Islands:				
Manila.....	Dec. 20-26.....	2		From steamship Ixion.
Portugal:				
Lisbon.....	Nov. 22-May 1.....	35		
Russia:				
Moscow.....	Nov. 8-Apr. 4.....	196	59	Feb. 20-27: Cases, 6; deaths, 1.
Odessa.....	Oct. 25-Nov. 18.....	10	1	
Do.....	Nov. 30-Mar. 13.....	111	13	
Petrograd.....	Oct. 25-Apr. 10.....	888	287	
Riga.....	Oct. 11-Apr. 24.....	242		
Vladivostok.....	Mar. 2-8.....	1		
Santo Domingo:				
Santo Domingo.....	Feb. 1-15.....		2	
Spain:				
Almeria.....	Mar. 1-31.....		2	
Barcelona.....	Nov. 22-Mar. 25.....		66	
Madrid.....	Nov. 1-Feb. 28.....	5	10	
Do.....	Mar. 1-31.....		9	
Seville.....	Dec. 1-Mar. 31.....		12	
Valencia.....	Nov. 15-May 8.....	1,130	62	
Straits Settlements:				
Singapore.....	Oct. 10-Mar. 20.....	19	8	
Sweden:				
Stockholm.....	Dec. 13-19.....		1	
Sundsvall.....	Feb. 1-28.....	1		
Switzerland:				
Basel.....	Nov. 7-Apr. 24.....	81		
Turkey in Asia:				
Beirut.....	Nov. 1-Apr. 24.....	140	47	Present in villages in vicinity.
Hafia.....	Nov. 2-Dec. 6.....	14	6	
Jaffa.....	Jan. 10-Apr. 3.....	8		
Jerusalem.....	Oct. 1-Nov. 30.....	5		
Tripoli.....	Dec. 27-Apr. 17.....	63	4	
Venezuela:				
Zulia, State.....	Apr. 25.....			Outbreak.
Zanzibar.....	Nov. 14-21.....		7	



SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

HAWAII.

Sanitary Code—Definitions of Terms. (Reg. Bd. of H., Feb. 11, 1915.)

The regulations of the Territorial board of health of the Territory of Hawaii, adopted on February 11, 1915, called the Sanitary Code and made in conformity with act 63, session laws 1913, amending section 991, Revised Laws, as amended by act 42, session laws 1905, and act 132, session laws 1911.

SECTION 1. *Definition of terms.*—The term "board of health," "board," "this board," and "said board" whenever used in this code shall be held to mean the Territorial board of health of the Territory of Hawaii. The term "agent," "the agent," or "agents" whenever used in this code shall be held to mean an agent or agents of the Territorial board of health of the Territory of Hawaii. The words "person," "owner," "tenant," "lessee," "occupant," "contractor," "party," "manager," "board," and "officer" shall be, respectively, held to apply to and include, both jointly and severally, each and all owners, part owners, tenants, lessees, occupants, contractors, parties in interest, persons, managers, boards, officers, and corporations who may sustain the relations or may be in like position of any one or more thereof referred to in any section. The words "Territory," "this Territory," and "said Territory" whenever used herein shall be held to mean the Territory of Hawaii. The word "regulations" shall be held to include special regulations (which latter may be from time to time issued and may contain more detailed provisions than can be herein set forth). The word "permit" or "certificate" shall be construed to mean the permission or certification in writing of this board or its agents, issued according to laws, regulations, or the Sanitary Code. The word "light" or "lighted" shall be held to refer to natural external light, and all words and phrases herein defined shall also include their usual and natural meaning, as well as those herein especially given.

SEC. 2. The word "street" when used in this code shall be held to include avenues, public highways, sidewalks, gutters, and public or private alleys; and the words "public place" shall be held to include parks, piers, docks, and wharves, and water and open spaces thereto adjacent, and also public yards, grounds, and areas, and all open spaces between buildings and streets, and in view of such streets; and the word "ashes" shall be held to include cinders, coal, and everything that usually remains after fires; the word "rubbish" shall be held to include all the loose and decayed material and dirtlike substance that attends use or decay, or which accumulates from buildings, storing, or cleaning; the word "garbage" shall be held to include swill and every accumulation of both animal and vegetable matter, liquid or otherwise, that attends the preparation, decay, and dealing in or storage of meats, fish, fowls, birds, or vegetables; and the word "dirt" shall be held to mean natural soil, earth, and stone.

Buildings—Location, Construction, and Sanitary Regulation. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 4. *Definitions.*—In this code the following terms shall have the meanings respectively assigned to them, viz:

First-class building.—A first-class building shall consist of fireproof material throughout, with floors and roof constructed of steel or reinforced concrete beams, filled in between with terra cotta or other masonry arches or with concrete or reinforced concrete slabs; wood may be used only for flooring, windows, and door frames, sashes, doors, interior finish, hand rails for stairs, necessary sleepers bedded in the cement, and for isolated furrings bedded in mortar. There shall be no air space between the top of any floor and the floor boarding.

Second-class building.—A second-class building is a building constructed with walls of masonry or concrete supporting the adjacent floor loads, with the interior floors supported by studded partitions or by columns and girders, with the roof or roofs constructed of incombustible material, with combustible materials used in any part, except outer walls and roofs, and with all wooden partitions and ceilings plastered.

Third-class building.—Any building or structure which does not come within the designation of either a first or second class building shall be deemed a third-class building.

Exemptions.—The provisions of this code relating to first and second class buildings shall not apply to voting booths nor to temporary structures used to facilitate the erection of buildings, provided that when the building is completed the temporary structure shall be removed.

Foundations.—That part of a wall below the level of the highest part of the street curb, or, if a wall is not on a street, that part of the wall below the level of the highest ground next to the wall, or, that part of a party or partition wall below the cellar floor.

Party wall.—A wall that separates two or more buildings, and which is used or adapted for the use of more than one building.

Curtain wall.—An interior or exterior nonbearing wall that is supported at each floor level by the skeleton frame of the building.

Partition wall.—An interior subdividing wall.

Thickness of wall.—The minimum thickness of any wall.

Story of a building.—That part of a building between the top of any floor beams and the top of the floor or roof beams next above.

Basement.—That story of a building not more than 40 per cent of which is below the grade of the street.

Cellar.—That part of a building not more than 40 per cent of which is below the grade of the street, and in third-class buildings that part of the building which is below the sills.

Hotel.—A house or building for the entertainment of travelers and others, properly distinguished from the lodging house by its superior style and pretensions, and having more than 20 sleeping rooms for guests.

Boarding or lodging house.—A boarding or lodging house is a building used for boarding or lodging purposes, containing not less than 5 nor more than 20 sleeping rooms for guests.

Tenement.—A tenement house is any house or building, or portion thereof, which is rented, leased, let, or hired out, to be occupied, or is occupied, or is intended, arranged, or designed to be occupied, as the home or residence of three families or more living independently of each other, and doing their cooking on the premises, and having a common right to the halls, verandas, stairways, yards, water supply, water-closets or privies, or some of them; or by more than two families above the first story so living and having a right in common to use the conveniences aforesaid, or some of them.

Office building.—An office building is a building, the whole or larger part of which is intended or used for office purposes, no part of which is used for living purposes, except by the janitor and his family.

Public hall.—A public hall is a room for public assemblages, having a total seating capacity of 100 or more persons, but which does not include a theater.

Theater.—A theater is a building containing a room used for theatrical, operatic, or moving picture exhibitions, or other public entertainments, having a total seating capacity of 200 or more persons, and being provided with a curtain for moving pictures or a stage upon which movable scenery is used.

Hospital, sanatorium, or asylum.—A hospital, sanatorium, or asylum is a building in which sick, demented, injured, infirm, aged, or orphaned persons are housed, or intended to be housed.

Warehouse.—A warehouse is a building used for the storage of goods, wares, or merchandise.

Factory.—A factory is a building used for manufacturing purposes.

SEC. 5. *Air space between buildings.*—No building, not flush with a street or streets bounding the lot on which it is to stand, shall hereafter be erected within 5 feet of any other boundary line of said lot, unless the nature and location of such building and the purposes for which it is to be constructed and adapted do not require said vacant space for the preservation of public health and public sanitation. There shall be a clear air space of 10 feet between all buildings, except such as are flush with a street or streets bounding the lot on which they stand unless the nature and location of such buildings and the purposes for which they are to be constructed and adapted do not require said vacant space for the preservation of the public health and public sanitation. The word "buildings" in this paragraph shall be construed to mean and include sheds, lean-tos, privies, outhouses, and all other structures of similar character.

SEC. 6. *Rain water.*—Where the space between buildings is less than 15 feet, the water from the roofs of the building shall be made to discharge into suitable drains leading into street or alley gutters, and if any building is so situated that the water from the roofs of said building will run under the building and not drain off the same rule shall apply.

SEC. 7. *Light and ventilation of dwellings.*—Each and every room intended or used for human habitation shall be provided with at least 8 square feet of window area, having unobstructed access into the open air, for each 100 square feet of floor space in said room, and free access shall at all times be had to the same by the occupants of the room, and at least one-half of such window space shall be movable and available for ventilation. The word "room" in this paragraph shall be construed to mean and include any space for occupancy or use inclosed on all sides by walls, or by partitions which are 5 feet or more in height.

SEC. 8. *Air space under buildings.*—Every building, except as otherwise provided, shall have at least 20 inches of clear air space for the circulation of air between the floor timbers and the highest point of ground under same, and shall have sufficient openings for ventilation in the outer walls to admit a free circulation of air; but said air space shall not be secured by excavating below the level of the street and lot on which said building is to stand, and this air space shall not be used for storage but shall be kept clean and sanitary. In case said air space is not provided for in accordance with this code the ground floor of all such buildings shall be of concrete, asphaltum, or masonry so constructed as to leave no spaces or openings beneath the same.

SEC. 9. *Courts, areas, lanes, etc.*—Whenever in the judgment of the board or its agents the public health requires, they may order and direct any court, area, lane, or alley to be effectively paved and drained so as to prevent the saturation and contamination of the soil and air; and all such courts, areas, lanes, and alleys, whether paved or not, shall at all times be kept clean and free from all accumulations of ashes, garbage, or other waste substances by the owners, occupants, or persons in possession.

SEC. 10. *Tenement buildings.*—No tenement house constructed of wood shall be more than two stories in height. In the rear of every tenement house there shall be a clear yard extending across the entire width of the lot; the depth of such yard, measured from the extreme rear of the house to the rear line of the lot, shall never be less than 10 feet; and the side of every tenement and in at least every 100 feet of every tenement or abutting tenement over 100 feet in length, running from the front to the rear of the tenement, there shall be an alleyway open to the sky not less than 5 feet wide, which shall be kept clear, which shall be concreted with a 4-inch slab, and the ground under any tenement shall be concreted to the same thickness. All porches shall be connected to the ground by stairways with handrails. A tenement situated in the rear of another tenement shall be separated from the front building by a clear space across the entire length of the building of not less than 10 feet. This space shall be concreted and kept clear. No tenement house shall be altered or repaired except such alterations, repairs, or changes shall meet with the approval of the board of health or its agents.

SEC. 11. All houses, structures, rooms, or parts thereof in which water is used or intended to be used in such quantity as to render the floor or floors or the ground under the floor or floors thereof damp shall have such floor or floors made absolutely waterproof, with proper drainage into trapped leaders conveying the water away into cesspool or sewer, where practicable. The waterproofing of all such floors shall be done in a manner satisfactory to the board of health or its agents.

SEC. 12. No building or structure shall be used as a residence or place for human habitation or abode which is situated upon land that has been made by filling in with dangerous and insanitary refuse or garbage or any substance dangerous to the public health.

Privies and Cesspools—Location, Construction, and Removal of Contents.
(Reg. Bd. of H., Feb. 11, 1915.)

SEC. 13. *Regarding privy vaults and cesspools.*—No privy vault, sink, or cesspool shall hereafter be located or constructed within 50 feet of any stream, lake, pond, well, or spring of water, nor within 2 feet of the line of any lot, nor placed in such a position that it is not easily accessible for emptying and cleaning. No privy vault shall extend farther beneath the privy covering it than to meet a perpendicular line drawn from the front edge of the seats in said privy. All privies shall be made fly-proof.

The word "cesspool" in this code shall be construed to mean and include all excavations for the reception of waste matter into which waste water flows. All cesspools shall be properly sealed.

The words "privy vault" in this code shall be construed to mean and include all excavations for the reception of waste matter into which no waste water flows.

SEC. 14. When deemed necessary by the board of health or its agents, the sides and bottom of any privy vault, sink, or cesspool shall be made either wholly or in part water tight, so as to prevent any saturation of the ground about the said vault, sink, or cesspool, and shall be properly vented.

SEC. 15. A cesspool or other sanitary means of disposing of waste shall be completed before any building hereafter to be constructed shall be occupied. No structure or cover shall be put upon or over any privy vault, sink, or cesspool until it has been inspected by the proper agent of the board of health and approved as meeting the requirements of these regulations and of public health.

SEC. 16. Any privy vault, sink, or cesspool already constructed which has become a nuisance or in any way dangerous to life or detrimental to health shall be removed, reconstructed, altered, or disinfected to meet the requirements of these regulations and of public health as directed by the board of health or its agent.

SEC. 17. No privy vault or cesspool shall be excavated or maintained within 10 feet from any dwelling house or inhabited building, or cook house or place where cooking is done.

SEC. 18. Within 30 days after service of a written notice upon the owner or owners, occupants, or persons in possession of any land within the limits of the public sewer system, directing said owner or owners to connect with the public sewer, the use of privy vault and cesspools shall be entirely discontinued upon such lands; all cesspools shall be emptied, disinfected, and filled in accordance with the requirements of these regulations and of the public health; and all privy vaults shall be removed except in so far as permission may be granted by the board of health or its agents to transform the same into approved water-closets connected with the sewer system.

SEC. 19. No cesspool or privy vault shall be built or maintained in any location except the same shall have a substantial water-tight curb which shall retain the earth without and the contents of the cesspool or vault within and shall be provided with a substantial water-tight cover properly sealed.

SEC. 20. All cesspools and privy vaults shall be properly vented to the satisfaction of the board of health or its agents.

SEC. 21. All cesspools or privy vaults when abandoned and the use thereof discontinued shall be at once entirely emptied of liquid and solid contents and shall be disinfected and filled with earth, sand, ashes, or other clean materials to the satisfaction of the board of health or its agents.

Plumbing—Connections with Sewers. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 22. *Sewer connection required.*—In the construction, reconstruction, or alteration of any building of any description in which plumbing fixtures are to be placed, all plumbing work shall be connected with the public sewer, where such sewer is accessible, and where there is no sewer accessible with a suitable and properly constructed cesspool.

SEC. 23. *House sewer.*—The term "house sewer" is herein used to designate that part of the drain between the sewer or cesspool and to within 5 feet of the building connected or to be connected with the sewer or cesspool. House sewers shall not be less than 4 inches in diameter and shall be of cast-iron pipe or salt-glazed vitrified pipe and shall be laid to a true grade, at least 1 foot under ground. Changes in direction shall be made by Y branches and one-sixth, one-eighth, or one-sixteenth bends. Salt-glazed vitrified pipe will not be allowed under any building. If salt-glazed vitrified pipe is used in the construction of any sewer it shall have a fall of at least one-quarter of an inch to the foot, the joints shall be made of mortar composed of equal parts of Portland or other good standard cement and clean-screened sand, and said joints shall be covered with cloth in laying. A disk entirely filling the house sewer pipe shall be kept in the pipe and drawn forward as each length is laid. When salt-glazed vitrified pipe is used in wet ground or water, the same shall be concreted entirely around the pipe up to a thickness of at least 6 inches. When cast-iron pipe is used all joints shall be packed with picked oakum and run with molten lead and shall be well calked and shall have a fall of not less than three-sixteenths of an inch to the foot. In the construction of any house sewer no intermediate section of salt-glazed vitrified stone pipe shall be used between sections of cast-iron pipe, nor shall any cast-iron sections be used between sections of salt-glazed vitrified stone pipe. The free flow of air shall not be obstructed in any house sewer when connected with any cesspool or sewer.

SEC. 24. *House drains.*—The term "house drain" is herein used to designate that part of the drain under the first floor of the building or structure and extending 5 feet outside of the walls thereof. All house drains shall be of cast-iron or galvanized wrought-iron pipe not less than 4 inches in diameter, and shall have a fall of not less than three-sixteenths of an inch to the foot. In buildings or structures of over three stories in height the grade of cast-iron pipe commercially known as "extra heavy," or galvanized wrought iron, shall be used for the house drain soil waste; all vent pipes and fittings shall be of the same grade. All house drains shall be securely ironed to

walls or laid in trenches of uniform grade or suspended to floor timbers by strong iron hangers. In no case shall double hubs be allowed, and all hubs shall be laid opposite to the fall of the sewer. Brass clean-out connections located in accessible places shall be put in all house drains at the foot of each vertical riser and at every change of direction of the drain.

SEC. 25. Soil pipes.—The term "soil pipe" is herein used to designate the vertical pipe to which one or more water-closets or other fixtures are connected. All soil pipes shall be of cast-iron or galvanized wrought-iron pipe not less than 4 inches in diameter, and if of cast-iron, in buildings of over three stories, shall be of extra heavy grade. All soil pipes shall be continued unobstructed and undiminished in size not less than 1 foot nor more than 14 inches above the roof of the building. Higher terminations, required in exceptional cases, shall only be made by special permission from the proper agent of the board of health. All soil pipes shall be run on as straight a line as possible, and shall not terminate within 10 feet of any window or opening. If galvanized wrought-iron pipe is used, all the fittings must be recessed and the pipe reamed to full bore.

In the construction of soil pipes, all cast-iron pipes and fittings shall be covered inside and outside with a coating of asphaltum. Changes in direction of soil pipes shall be made by Y branches and one-sixth, one-eighth, or one-sixteenth bends; and in no case shall double hubs be used except for vent fittings where the fittings are to be inverted. Sanitary T's may be used in vertical runs. Tin pipes, and pipes made from sheet metal, shall not be used in the construction of soil pipes. No 4 by 2 or other heel outlet fitting shall be allowed to act as a waste or vent pipe through the heel opening, except on vertical lines. The use of cements of any description to repair splits or breaks in cast-iron pipes or fittings shall not be allowed.

Not more than the following number of water-closets may be connected on the various sizes of soil pipes designated below:

- 12 water-closets on 4-inch soil or branch pipe.
- 25 water-closets on 5-inch soil or branch pipe.
- 60 water-closets on 6-inch soil or branch pipe.

No soil or drain pipe shall be more than 6 inches in diameter, and when a greater number than 60 water-closets are in one building, two soil or drain pipes must be run to the main sewer in the street, and shall be continued up to and through the roof full size; and where vertical lines of soil pipes extend to water-closets on the third floor the same must extend full size through the roof.

SEC. 26. Waste pipes.—The term "waste pipe" is herein used to designate any pipe leading from any fixture to a soil pipe or house drain and receiving the discharge from any fixture. All waste pipes, except as herein provided, shall be of iron. Branch waste pipes may be constructed of lead or iron: *Provided, however, That if lead is used it shall be only as a branch to connect with an iron pipe and shall not exceed 3 feet in length.* The size of waste pipes shall vary according to the fixtures they are to serve, and in no event shall be less than the following:

	Inches.
Closets.....	4
Slop sinks.....	3
Floor drains.....	2
Baths.....	1½
Sinks.....	1½
Wash trays.....	1½
Urinals.....	1½
Bar wastes.....	1½
Basins.....	1½

All waste pipes from grease traps shall be in size not less than the outlets of same. Waste pipes from refrigerators, or other receptacles in which provisions are kept, shall not connect directly with the drain, soil, or vent pipes, or discharge upon the ground beneath the building, but shall be trapped and the discharge therefrom allowed to drip into an open fixture in daily use, or be conveyed to the ground at least 3 feet away from the building.

No continuous wastes shall exceed 16 feet in length, and the traps for same shall not be less than $1\frac{1}{2}$ inches. Continuous wastes on urinals shall not be allowed.

SEC. 27. *Traps*.—All fixtures shall be separately and independently trapped as near the opening thereof as practicable.

All traps shall have a water seal of not less than $1\frac{1}{2}$ inches in depth, and shall be set true to water seal. The size of every trap shall be the same as the waste pipe it serves.

No grease trap shall in any case be placed under a building or structure. The capacity of grease traps shall be as follows: For restaurants, hotels, tenement and boarding houses, not less than 30 gallons. All grease traps shall be constructed subject to the approval of the proper agent of the board of health. No bell traps shall be used in any case.

Antisiphon traps shall only be used where the proper agent of the board of health finds that it is impracticable to use any other. All traps shall be of lead or brass with the exception of traps in the ground or in concrete which shall be of cast iron coated with asphaltum.

All traps with internal partitions, or any mechanism forming a seal, are strictly prohibited.

SEC. 28. *Vents*.—In every building or structure where there is a water-closet there shall be at least one 4-inch cast-iron vent pipe running from the house drain unobstructed and undiminished in size to a point not less than 1 foot above the roof of the building or structure or fire wall, or if such building or structure has a fire wall within 10 feet of said vent, then not less than 1 foot above said fire wall. The terminal of all vents shall be at least 10 feet from any window or opening.

All traps within any building, or within 5 feet of any building, shall be vented by special air pipes of lead or iron, but in no case shall a vent pipe end in a chimney or earthenware flue. No lead pipe shall be used for any vent except as a branch to connect with an iron pipe, and then only for a distance not to exceed 2 feet. Vent pipes may converge into one pipe at any point not less than 3 feet 6 inches above the floor line of the building or structure. All vent pipes shall be extended above the roof of the building or structure in the same manner as the 4-inch cast-iron vent pipe herein referred to. All vent branches must be taken from the top of waste or crown of trap.

The size of vent pipes for each fixture shall not be less than the following:

	Inches.
Basins.....	$1\frac{1}{2}$
Sinks.....	$1\frac{1}{2}$
Baths.....	$1\frac{1}{2}$
Wash trays.....	$1\frac{1}{2}$
Urinals.....	$1\frac{1}{2}$
Bar sinks.....	$1\frac{1}{2}$
Bidet.....	$1\frac{1}{2}$
Sitz baths.....	$1\frac{1}{2}$
Water-closets.....	2
Slop sinks.....	2
Dirt catchers.....	2
Floor drains with 2-inch traps.....	$1\frac{1}{2}$
Floor drains with 3-inch or 4-inch trap.....	2

All vent pipes shall have a grade toward the trap, and shall not be carried more than 12 feet out of a vertical line to enter another pipe without increasing one size larger.

When two water-closets are on a 4-inch vent stack, such stack may vent both closets, providing it is within 24 inches of the traps of such closets on the line of the pipe.

Whenever fixtures are grouped the vents therefor shall not be less than the following:

One 1-inch vent on one $1\frac{1}{4}$ -inch pipe.

Three $1\frac{1}{4}$ -inch vents on one $1\frac{1}{4}$ -inch pipe.

Two $1\frac{1}{2}$ -inch vents on one $1\frac{1}{2}$ -inch pipe.

Six $1\frac{1}{4}$ -inch, or five $1\frac{1}{2}$ -inch, or three 2-inch vents on one 2-inch pipe.

Ten $1\frac{1}{4}$ -inch, or seven $1\frac{1}{2}$ -inch, or four 2-inch vents on one $2\frac{1}{2}$ -inch pipe.

Thirteen $1\frac{1}{4}$, or ten $1\frac{1}{2}$ -inch, or six 2-inch vents on one 3-inch pipe.

Eighteen $1\frac{1}{4}$ -inch, or thirteen $1\frac{1}{2}$ -inch, or eight 2-inch vents on one $3\frac{1}{2}$ -inch pipe.

Twenty-four $1\frac{1}{4}$ -inch, or sixteen $1\frac{1}{2}$ -inch, or eleven 2-inch vents on one 4-inch pipe.

SEC. 29. *Joints and connections.*—All joints of cast-iron pipe shall be packed with picked oakum and run with molten lead and shall be well calked. Joints and connections in lead pipe shall be made with wiped joints. Connections of lead with cast-iron pipe shall be made with brass ferrule and wiped joints; connections of lead and wrought-iron pipe shall be made with brass soldering nipple and wiped joints, screwed in. Connections of brass and wrought-iron pipe shall be made with a brass screw collar.

SEC. 30. *Water-closets.*—The use of pan, hopper, or plunger closets is prohibited. No water-closet, slop sink, or urinal shall be placed or maintained in any room in which there is not a window opening direct to the external atmosphere, but in lieu thereof such room may be ventilated by means of a shaft or air duct, at least 8 inches in diameter, or of equal area, and as near the ceiling as possible, and carried thence through the roof. The stopcocks shall be placed on all supply pipes to water-closet tanks and not less than $1\frac{1}{4}$ inches above the floor.

In factories, workshops, tenements, and rooming houses there shall be provided one water-closet for each 10 persons, or fraction thereof, of each sex.

Range closets are strictly prohibited.

Toilets shall be separate in all cases. All residences shall be provided with at least one water-closet and one sink.

All water-closets, earthen or iron, having traps above the floor, using lead connections, shall be fastened to the floor with a cast brass flange, not less than one-eighth of an inch thick. Said flange to be properly soldered to lead pipe and made perfectly tight with red lead putty connections. And when iron connections to water-closet traps are used they shall be with cast or galvanized wrought-iron pipe with cast brass flanges not less than one-eighth of an inch thick, and the flanges either calked or screwed on.

Rubber washers shall not be used.

SEC. 31. *Urinals.*—All urinals, or groups of urinals, shall be supplied with water. The floor and sides around all urinals shall be covered with noncorrosive and non-absorbing material.

SEC. 32. *Safe wastes.*—No safe wastes shall be used in conjunction with urinals. Safe wastes from any fixture shall not be connected, directly or indirectly, with any sewer, house drain, soil, or waste pipe.

SEC. 33. *Clean-outs.*—All clean-outs shall be in accessible places, and where cement floors are laid they shall be brought up flush with the floor, and shall not be used as a floor drain. They shall be of brass; combinations of brass and iron not allowed.

SEC. 34. *Remodeling or removals.*—Whenever a building is moved or remodeled the plumbing work therein must conform in all respects to the provisions of this code, and where old fixtures are removed from any building and new fixtures substituted, or where old fixtures are changed, such work and the drainage and ventilation must conform to the provisions of this code. When a building is moved the plumbing in the building may remain if, after having been tested, the same is found

to be water-tight and free from all defects. New sewers for old houses shall be deemed new work.

SEC. 35. *Sinks or wash trays.*—No sinks or wash trays of wood shall be constructed, installed, or used except in hotel or restaurant kitchens or buildings used for industrial purposes: *Provided*, That when so constructed, installed, or used in hotel or restaurant kitchens or buildings used for industrial purposes, such sinks and wash trays shall be built of 2-inch sugar pine and as directed by the agent of the board of health.

SEC. 36. *Fixtures.*—No open end of any waste pipe or water-closet shall be placed less than 2 feet above high tide, as established by the datum used in Government work. No woodwork of any description shall be placed around any fixture, except for capping frame.

SEC. 37. *Exposed plumbing.*—All pipes and fixtures shall be left exposed to view as much as possible.

SEC. 38. *Exemptions.*—The foregoing sections relating to plumbing shall only apply to such places as are thickly inhabited or where the means and facilities are reasonably accessible.

Tenements and Lodging Houses—Location, Construction, and Sanitary Regulations. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 39. *Sanitary conduct and restrictions.*—It shall not be lawful for any person to locate, build, construct, maintain, or keep a tenement house in any locality within the Territory of Hawaii in which two-thirds of the buildings located as a whole or in part within 500 feet of such tenement house are devoted or adapted to exclusive residence purposes: *Provided, however*, That this section shall not be applicable in any locality where the owners of a majority of the lots which are located as a whole or in part within 500 feet of such tenement house consent in writing to such location of such tenement house.

SEC. 40. No person shall construct or erect, or cause to be constructed or erected, in the Territory any building or structure designed or intended to be used for a lodging or tenement house, or shall keep or maintain any lodging house or tenement house, within 500 feet of any premises upon which is maintained any public school, orphanage, reform or industrial school, or upon which is maintained any sectarian or private school at which not less than 25 pupils are in attendance.

SEC. 41. No room of any tenement shall afford less than 400 cubic feet of air to each person over 12 years of age, and 200 cubic feet of air for each child under 12 years of age, occupying the room. There shall be no cooking done on the porches. The floors of all outside water-closets and urinals, and 8 inches high on all walls of same, shall be of concrete. No wall paper shall be put on the walls of a tenement house, unless the former wall paper shall have been removed and the walls thoroughly cleaned, nor shall cloth lining be used on ceiling or walls.

SEC. 42. Every tenement house and every part thereof shall be kept clean and free from any accumulation of dirt, filth, and garbage or other matter, in or on the same, or in the yards, courts, passages, areas, or alleys connected with or belonging to the same. The owner of every tenement house, or part thereof, shall thoroughly cleanse all the rooms, passages, stairs, floors, windows, doors, walls, ceilings, privies, water-closets, cesspools, drains, halls, cellars, roofs, and all other parts of the said tenement house, or parts thereof, or part of the house of which he is the owner, to the satisfaction of the board of health or its agents, and shall keep the said parts of the said tenement house in a cleanly condition at all times.

SEC. 43. No owner, agent of owner, lessee, or person in charge of, or in control of, any tenement or lodging house, shall permit any person or persons to occupy any room of any tenement or lodging house, and no person or persons shall occupy any room of

any tenement or lodging house, in which the air space afforded is less than 400 cubic feet of air to each person over 12 years of age, and 200 cubic feet of air for each child under 12 years of age, occupying the room.

SEC. 44. *Receptacles and garbage.*—The owner of every tenement house shall provide and maintain therefor, suitable covered, water-tight metallic receptacles for ashes, rubbish, garbage, refuse, and other matter. No person shall place ashes, rubbish, garbage, refuse, or other like matter, in the yards, open areas, or alleys connected with or appurtenant to any tenement house, except in such receptacle as described above.

SEC. 45. Every apartment or room containing a water-closet or urinal shall be properly ventilated by means of a window opening directly into the open air.

SEC. 46. No horse, cow, calf, swine, sheep, goat, or chickens shall be kept in a tenement house, or on the same lot or premises thereof, and no tenement house or the lot or premises thereof shall be used for the storing or handling of old rags, bags, bottles, etc., nor for the storing or handling of vegetables designed for human consumption.

SEC. 47. In any tenement house in which the owner thereof does not reside, there shall be a janitor, housekeeper, or other responsible person who shall reside in said house and have charge of the same, if the board of health or its agent shall so require.

SEC. 48. In tenement houses, or lodging houses, no room in the basement or cellar shall be constructed, altered, converted into or occupied for living purposes.

SEC. 49. Whenever it shall be certified by an inspector or agent of the board of health that a tenement house, or lodging house, or any part thereof, is unfit for human habitation, or dangerous to life or health by reason of want of repair, or of defects in the drainage, plumbing, ventilation, or the construction of the same, or by reason of the existence of a nuisance likely to cause sickness among the occupants of said house, the board of health, after a hearing, may issue an order requiring all persons therein to vacate such house, or part thereof, within not less than 24 hours nor more than 10 days, for the reasons to be mentioned in said order. In case such order is not complied with within the time specified, the board of health may cause said tenement, or lodging house, or part thereof, to be vacated. The board of health whenever it is satisfied that the danger of said house, or part thereof, has ceased to exist, or that it is fit for human habitation, may remove said order, or may extend the time within which to comply with the same.

Restaurants—Sanitary Regulation. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 50. The word "restaurant" as used in this code shall be held to include all hotels and eating houses of every description.

All restaurants shall provide, in places where foodstuffs are kept, prepared, cooked, or served to customers, full protection from dust, dirt, flies, and vermin, by glass cases, wire screens, fans, and other modern and approved methods, and shall cause the abatement and destruction of vermin and flies wherever found.

All restaurants shall be equipped with covered metallic cans for retaining and keeping their garbage and waste in a sanitary manner, which shall be kept in such place and manner as will preclude nuisances and contamination of the kitchen and such rooms from odors and from all possibilities therefrom.

Restaurants, kitchens, and other rooms connected therewith shall be provided with ample facilities for washing and cleaning all eating and cooking utensils and with a proper supply of hot and cold water; and no eating or drinking utensil soiled by use shall be used in the serving of food or foodstuffs in any manner without first being properly cleaned.

All restaurants and their kitchens must be kept clean and wholesome at all times, and precautions taken to prevent nuisances from the dissemination of odors and smells arising from the creating, keeping, or handling of garbage, and all odors, vapors,

smells, and smoke from cooking must be disposed of and, if necessary, by air shafts, fans, forced air, or other modern and approved methods.

All rooms used for the cooking and preparing of foodstuffs shall have floors and side walls so constructed as to exclude vermin, rats, mice, and be kept in a state of good repair.

Bakeries—Sanitary Regulation—Vehicles and Receptacles. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 51. The provisions of this regulation shall extend and apply to every room or building occupied as a biscuit, bread, pretzel, pie, cracker, or cake bakery; or for the purpose of making candy, pop corn, ice cream cones, ice cream, or confectionery of any kind; also to any place where any of the articles above mentioned are made, kept for sale, sold or stored, and shall include bake rooms of hotels and restaurants. The term "bake shop," wherever mentioned in this regulation, shall be held to mean and apply to any such establishment mentioned above.

SEC. 52. Every bake shop shall at all times be kept in a clean state and free from effluvia arising from any drain, privy, water-closet, or other nuisance. The troughs and all the utensils used in the making of bread and pastry shall be kept scrupulously clean and must be capable of being moved about for the purpose of cleaning the floor. All floors shall be constructed of impervious material. No person suffering, or who has recently suffered from, or been in contact with any infectious, contagious, or communicable disease shall be permitted to enter any bake shop or take part in the manufacture or sale on the premises, or in the delivery of bread, biscuit, candy, or confectionery. All vehicles from which any biscuit, bread, candy, or other products are delivered or sold shall be kept in a clean and sanitary condition; and all vehicles, boxes, baskets, or other receptacles in which any of the aforesaid products are conveyed through the streets shall be closely covered in a way and manner that will protect them from any pollution whatever. All drivers and other persons engaged in handling or delivering any of the articles mentioned above shall be cleanly in person and attired in a cleanly manner. No person so employed shall carry any such articles in his hands or on his arm unless the same are wrapped in paper or other material, so as to prevent their contact with dust or other contamination.

Foodstuffs—Fruits and Vegetables—Protection. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 53. *Fruits and vegetables.*—It shall be unlawful to expose for sale, or to sell from any stock in trade, within the Territory of Hawaii, any food or foodstuffs, for human consumption, of the names and descriptions hereinafter mentioned, unless such food or foodstuffs shall be protected from dust, dirt, and from contact of and contamination by flies and other insects, and from promiscuous handling and other contamination, in the manner or manners herein prescribed.

SEC. 54. The food or foodstuffs which shall be protected as herein prescribed shall comprise the following generally and specifically named and described articles, to wit:

(a) All dried fruits and vegetables, all fruits and vegetables which are not sold whole, and all compounds, essences, extracts, and substances derived in part or in whole from fruits, vegetables, nuts, and roots, or from one or more of such sources.

(b) All the fruits, vegetables, and products of land or sea called and known by the names and descriptions here following, viz: Apples, apricots, berries of all kinds, celery, cherries, dates, figs, grapes, mangoes, ohia (mountain apple), peaches, pears, plums, tomatoes, and other plants sold for food which do not have their surfaces removed before eating.

SEC. 55. All such food or foodstuffs shall be effectually protected from dust, dirt, and contact of and contamination by flies and other insects, and from promiscuous

handling and other contamination, by means of a glass covering, or by wire-net screens of a mesh not less than 14 wires to the inch, or by fans so placed as may be sufficient to insure such protection.

Any such wire-net screen may be of any form suitable for its purpose, but it shall be fastened to a rigid framework and when in place must leave at least 3 inches of clear space between the net or its framework at any part and the exposed surface or surfaces of the food or foodstuffs which it protects. All such glass coverings and wire-net screens must be so constructed and placed as to properly and sufficiently protect all food or foodstuffs herein mentioned from dust and dirt, contact of and contamination by flies and other insects, and from promiscuous handling and other contamination.

SEC. 56. This regulation shall not apply to food or foodstuffs kept or exposed for sale in unbroken original packages unless the surfaces of their contents, when of the descriptions hereinbefore specified, are exposed to the outer air; nor to any articles of food kept in covered or sealed containers, whether to be sold in such containers or not, providing said articles are never exposed to the outer air, excepting while being handled in due course of business; nor to any food or foodstuffs kept in refrigerators, meat safes, or compartments protecting the same from dust and dirt, contact of and contamination by flies and other insects, and from promiscuous handling and other contamination.

SEC. 57. No food or foodstuffs hereinbefore mentioned shall be exposed for sale or displayed unless the bottom of the bottom or other receptacle containing such article is raised at least 2 feet above level of the floor or sidewalk.

SEC. 58. No person suffering or who has recently suffered or been in contact with any infectious or contagious disease shall engage or be employed in exposing for sale or selling any of the food or foodstuffs hereinbefore mentioned, when such engagement requires or permits the handling of the same.

SEC. 59. The provisions of this regulation shall apply to all markets, market stalls, stores, stands, cafés, restaurants, and other places, whether licensed or unlicensed, at which food, foodstuffs, confections, or provisions for human consumption are kept for sale, and to all licensed or unlicensed vehicles from which any food, foodstuffs, article of diet, or confection is sold or offered for sale.

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SEC. 122. *Contamination or infection of foodstuffs.*—Human habitation of any nature whatever is prohibited within any room or rooms, or within any immediate adjoining and connecting room or rooms, in which is stored, kept, or offered for sale any foodstuffs for human consumption.

Meat and Fish—Sale of—Protection. Meat and Fish Markets—Sanitary Regulation. Slaughterhouses. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 3. The word "meat" whenever herein used includes every part of any land animal and eggs (whether mixed or not with any other substance); and the word "fish" includes every part of any animal that lives in water, or the flesh of which is not meat; and the word "vegetable" includes every article of human consumption as food which (not being meat, or fish, or milk), is held or offered or intended for sale or consumption as food for human beings, at any place in said Territory; and all fish and meat found therein shall be deemed to be therein and held for such sales or consumption as such food, unless the contrary be distinctly proved.

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SEC. 60. *Meat, game, fish, etc.*—It shall be unlawful to expose for sale or to sell from any stock in trade within the Territory of Hawaii any game, poultry meat, butcher's meat, fish or sea food unless such foodstuffs shall be protected from dust, dirt, and from contact of and contamination by flies and other insects, and from promiscuous handling and other contamination.

SEC. 61. All meat markets, butcher stalls, fish markets, shops, or stands, or other places of business for the sale of game meat, poultry meat, butcher's meat, fish or sea food in the Territory shall be provided with tight hardwood, tile, or cement floors, with running water, and with sewer connections, if sewer is accessible.

All such meat markets, butcher stalls, fish markets, shops, stands, and other places of business, and all tools, implements, and fixtures used or employed therein shall be kept clean and in a sanitary condition, and all employees therein when handling the foodstuffs hereinbefore described shall wear clean linen, cotton, or rubber aprons, which shall be kept clean and in a sanitary condition.

No person suffering, or who has recently suffered from, or been in contact with any infectious or contagious disease shall engage, or be employed, in exposing for sale or selling any of the food or foodstuffs hereinbefore mentioned, when such engagement requires or permits the handling of the same.

All delivery wagons used for the delivery of game meat, poultry meat, butcher's meat, fish or sea food in the Territory of Hawaii shall be covered so as to exclude flies, dust, and other contamination, and shall be kept clean and in a sanitary condition.

No game, poultry meat, butcher's meat, fish or sea food shall be offered for sale or sold or delivered in the streets, roads, avenues, or alleys of the Territory, except the same shall be protected from dust, flies, or other insects and other contamination.

No game, poultry meat, butcher's meat, fish or sea food shall be wrapped in any newspaper, or part thereof, nor in wrapping paper that is soiled or has been used for any other purpose, but shall be wrapped in fresh, clean wrapping paper.

No refuse, scraps, bones, filth, rancid fat of decaying flesh shall be kept in any ice box in any meat market, butcher stall, fish market, shop, or stand with any game meat, poultry meat, butcher's meat, fish, or sea food.

Live poultry or fowl shall not be kept in the same room or compartment in which game meat, poultry meat, butcher's meat, fish, or sea food is kept or offered for sale; nor shall live poultry or fowl be kept in any room or compartment adjoining such room or compartment, if the conditions are such that the room or compartment in which the live poultry or fowl is kept, ventilates, or is liable to ventilate, into said other room or compartment so that the odors from such live poultry or fowl and their inclosures may contaminate such food or foodstuffs.

SEC. 62. The provisions of this regulation shall apply to all markets, market stalls, stores, stands, and other places, whether licensed or unlicensed, at which game meat, poultry meat, butcher's meat, fish, or sea food, for human consumption, is kept for sale, and to all licensed or unlicensed vehicles from which any of such articles are sold or offered for sale.

SEC. 63. *Fish.*—The sale of fish, and all edible products of the sea, is prohibited in the Territory except in such places as may be designated from time to time by the board of health where fish and edible products of the sea may be exposed for sale under the supervision of inspectors, approved by the board of health.

SEC. 64. Fish left unsold at 6 p. m. on the evening of any day shall be inspected and if found in proper condition may go to cold storage; and on again being offered for sale shall be labeled as "iced fish."

SEC. 65. It shall be unlawful to expose or offer for sale or to sell any "iced fish" that has been exposed or offered for sale on any previous occasion. Any "iced fish" which has been exposed for sale during the day shall not be kept for sale on the following day. The sale of any fish that has been iced or in cold storage which has thawed out and has been reiced or placed again in cold storage is strictly prohibited.

All "iced fish" exposed or offered for sale at any market, store, or fixed place of sale shall be kept and sold separate and apart from fresh fish, and there shall be conspicuously displayed on the slab or other place upon which "iced fish" are exposed or kept for sale a signboard at least 12 inches in length and 6 inches in width attached

to a stand at least 3 inches in height, having on each side of said signboard inscribed the words "iced fish" plainly marked on a white background in black letters at least 2 inches in height.

* * * * *

SEC. 124. Where any river, stream, lake, pond, or other body of fresh or salt water is polluted by sewage or other deleterious matters the taking of fish, shellfish, or any other product of the water for the purpose of using or disposing of same for human consumption is hereby prohibited.

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SEC. 80. *Abattoirs*.—No slaughterhouse will be allowed in the Territory in any location not first approved by the board of health or its agent.

SEC. 81. Slaughterhouses or buildings wherein cattle, sheep, or swine are killed or dressed shall be kept at all times in a clean and sanitary condition, and all offal, blood, fat, manure, or other unwholesome or offensive refuse shall be removed therefrom at least every 24 hours if used continuously, or if used occasionally within 24 hours after using; the floor of such building, place, or premises shall have an impervious floor which can be flushed and washed clean. No blood pit, dung pit, or offal pit shall be allowed in any room or building. Doors and windows shall be screened to exclude flies; the side walls, to the height of at least 6 feet, shall be of concrete or other impermeable material. All floors shall be properly sloped to a well-trapped outlet having a direct communication with a sewer or cesspool. All yards, apartments, and pens connected with a slaughterhouse shall be paved with some impervious material properly graded and drained. Every slaughterhouse shall be supplied with an adequate supply of pure water, and such an arrangement of hose and pipes as will enable the walls, floors, yard, and appurtenances to be efficiently washed.

SEC. 82. No pigs or swine shall be permanently kept on the premises of any slaughterhouse, or within 150 feet thereof.

SEC. 83. No dressed meat of any animal, or any part thereof, shall be conveyed or taken through any street, avenue, lane, road, or public place, unless the same shall be thoroughly covered with clean canvas, burlap, or other material so that the said meat shall be protected from dust, dirt, flies, and other contamination.

Milk and Cream—Production, Care, and Sale. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 66. *Dairies and dairy premises*.—For the purposes of this code a dairy or dairy premises shall be construed to mean and include any building, shed, land, or place used for the stalling, grazing, feeding, or milking of cattle for the purpose of producing milk or cream to be sold or supplied for profit, or any building or place used for the purpose of storing or depositing milk or cream when so produced.

SEC. 67. *Milking shed and stable*.—A milking shed or stable shall be construed to mean any shed, building, or yard which is used for the purpose of milking or milking and feeding cows.

SEC. 68. There shall be no living quarters in the milking shed or stable.

(a) No cattle, horses, or other domestic animals shall be kept within 50 feet of a milking shed or stable, and swine shall not be kept or allowed within 150 feet.

(b) The flooring and outside walls or curb shall be constructed of concrete or other approved impervious material.

The floors shall be free from faults and laid with proper slope for drainage to gutters, and said gutters shall be connected to a trapped catch basin and from such catch basin properly connected to a sewer or cesspool. The outside walls or curbing shall be at least 8 inches in height, with a concave surface on the inner side.

(c) Feed boxes shall be raised to sufficient height from the floor to permit of cleaning underneath, or, if made of impervious material, may be built on the floor.

(d) Milking sheds or stables shall be so constructed that if any part of said sheds or stables is used for the storage of hay or feed, such part or portion of said sheds or stables shall be tightly ceiled and partitioned to exclude dirt and dust.

There shall be no direct opening from any silo, grain pit, or feed room into the room in which cows are milked, unless the same is provided with a tight-fitting door.

SEC. 69. *Milk room.*—(a) The term milk room includes all buildings and rooms on dairy premises set apart for the purpose of depositing or storing milk or cream, whether for butter making, cheese making, drying, condensing, separating, straining, or cooling the same, or for washing or storing vessels and utensils used in their production, preparation, or conveyance. On every dairy premises a milk room shall be provided, whether the milk is stored or not, and it must not be used for any other purposes than those above named, and must be kept scrupulously clean. The milk room shall be detached, and shall be erected on a dry and well-drained site at a safe distance from places where dust may be expected to frequently arise, and free from contaminating influences such as yards of dwellings, drains, fowl houses and roosts, stables, dog kennels, privies, dung heaps, pigsties, etc. Where the area of the premises will permit, the minimum distance shall not be less than 50 feet from such above-mentioned contaminating influences, and pigsties shall not be less than 150 feet distant.

(b) Floors shall be of concrete or other impervious material properly graded and trapped to a sewer or cesspool.

Walls shall be constructed of stone, concrete, or other approved material to a height of at least 3 feet, and the superstructure if of wood shall be made tight. All milk rooms shall be ceiled. Every milk room shall have sufficient area for light and ventilation, and the necessary measures must be taken to exclude flies and dust. All interior woodwork shall be surfaced and painted or color washed.

(c) All utensils or containers used for the collection, cooling, storing, and transportation of milk, shall, before being used, be thoroughly washed with pure hot water and soda or soap, and then sterilized by boiling or steaming.

SEC. 70. *Sanitary conduct.*—(a) Approaches, gateways, and exits to sheds and yards shall be properly graded and drained, and gutters cut to prevent accumulation of water or mud near the yard.

(b) After each milking, the milking shed shall be "wet swept," dung and litter removed to the dung bin, and flooring washed down.

Sweeping shall not be commenced until the milk has been removed.

The surface of yards must be kept clean, and the dung and litter removed to the dung bin daily.

SEC. 71. *Milk.*—No milk producer or milk vendor shall either himself or through his agents, servants, or employees, offer or expose for sale or sell or deliver for sale, use, or consumption within the Territory, any milk without having first obtained a permit from the board of health or its proper agent. One such permit shall be required for each place of production, general sale or storage of milk. Such permits shall be issued only in the names of the owners or dealers of the supply of milk in storage or for sale, and shall, for the purposes of this code, be conclusive evidence of such ownership.

SEC. 72. *Manner of making application for permit.*—Any person desiring such a permit shall present and file with the board of health or its proper agent an application which shall include the following:

- (1) The name, business, and residence addresses of the applicant.
- (2) The source or sources from which said applicant obtains or will obtain supplies of milk.
- (3) The number of cows in the possession of said applicant.
- (4) The daily average quantity of milk disposed of by said applicant.
- (5) The manner and character of such disposition.
- (6) The specific brand or name, if any, under which said milk is to be sold, exchanged, or distributed.

(7) A certificate from a Government veterinary surgeon showing the cows to be free from tuberculosis.

SEC. 73. Issuing of permit.—If upon examination the premises of the applicant for such permit is found to be in a fit and sanitary condition, and suitable for the purpose for which it is intended to be used, a permit as aforesaid will be issued.

Such permit shall not be sold, assigned, or transferred, and shall hold good for one year from date of issuance, unless sooner revoked.

SEC. 74. Revocation of permit.—Such permit shall at all times be subject to revocation by the said board of health at its discretion upon sufficient cause therefor being shown; provided, however, that no permit shall be revoked until after a hearing given by the board of health in the matter of the revocation of such permit, after five days' notice in writing has been served on the owner of such permit, which notice shall state the ground of complaint against such owner, and the time and place of such hearing.

SEC. 75. Permit number must be displayed.—No person or persons, firm, or corporation shall sell or expose for sale or exchange or deliver or distribute milk from any wagon or vehicle, unless such wagon or vehicle shall have exposed on both sides thereof the permit number of the person or persons, firm, or corporation selling or offering or exposing for sale, or distributing or delivering or exchanging such milk. Such permit number shall be painted on said wagon or vehicle in Arabic numerals not less than 3 inches in height, and shall be placed on said wagon or vehicle under the direction of the proper agent of the board, and in case milk is sold from cans or vessels (not carried in any wagon or vehicle), then the permit number, as aforesaid shall be put in a conspicuous place on such can or vessel immediately below the opening thereof, so as to be plainly visible on casual inspection; or if such milk is sold or exposed or offered for sale, delivery, distribution, or exchange within a store or house, or on the sidewalk of any street, then such permit number shall also be constantly exposed, in some conspicuous manner, at the place where such milk is sold or kept, so as to be plainly visible.

SEC. 76. Unlawful to sell adulterated milk.—It shall be unlawful for any person or persons, firm, or corporation, by themselves or by their agents, servants, or employees, in the Territory, to render or manufacture, sell, offer for sale, or exchange, deliver, distribute, or have in his, their, or its possession with intent to sell, expose, or offer for sale or exchange, or distribute for human consumption, any impure, adulterated, unhealthful, or unwholesome milk, or any milk from which the cream has been skimmed or separated unless the same is specifically and openly stated to be "skimmed milk."

SEC. 77. Adulteration defined.—Milk shall be deemed to be impure, adulterated, and unwholesome within the meaning of this regulation under the following stated conditions, viz:

- (1) Milk containing less than $8\frac{1}{2}$ per cent of milk solids, excluding milk fat.
- (2) Milk containing less than 3 per cent of milk fat.
- (3) Milk drawn from cows within 15 days before or 5 days after parturition.
- (4) Milk drawn from cows fed on any unhealthful or unwholesome feed.
- (5) Milk which contains more than 1,000,000 bacteria per cubic centimeter.
- (6) Milk from which any part of the cream has been removed.
- (7) Milk which has been diluted with water or with any other fluid, or into which any foreign substance whatever has been introduced.
- (8) Milk drawn from cows that are in a condition of filth or uncleanness, or are suffering from, or have recently been exposed to any contagious, infectious, or communicable disease.
- (9) Milk drawn by milkers who are in a condition of filth or uncleanness, or who are suffering from, or have recently been exposed to any contagious, infectious, or communicable disease.

(10) Milk which is shown by analysis to contain any substance, or substances whatsoever, not natural or normal constituents of milk, or to have been deprived, either wholly or in part, of any constituent naturally or normally contained in milk.

(11) Milk containing any preservative or antiseptic.

(12) Milk which immediately upon being drawn from the cow shall not have been cooled to a temperature of 77° F., or lower, and kept at such temperature until delivered.

Sec. 78. *Condensed milk, buttermilk, and sour milk.*—Nothing herein shall be construed to prevent the use, sale, or manufacture of what is known as condensed milk, evaporated milk, concentrated milk, or what is known as buttermilk, or what is known as sour milk, provided the same are made, compounded, or prepared from pure, clean, fresh, wholesome, and unadulterated milk within the meaning of this code, are in sound and wholesome condition, and contain no preservative or antiseptic whatever; and, provided also, that in the case of condensed, evaporated, or concentrated milk it should contain, all tolerances being allowed for, not less than 25.5 per cent of total milk solids, and not less than 7.8 per cent of milk fat.

Further, condensed, evaporated, or concentrated milk shall contain no added butter or butter oil incorporated with it at any stage of its manufacture.

Sec. 79. *Skimmed milk.*—Pure skimmed milk shall be permitted for sale or delivery, provided that the cans or vessels containing it shall be distinctly labeled "Skimmed milk" in letters 1½ inches high.

Laundries—Sanitary Regulation. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 84. All laundries, or buildings used for laundry purposes, shall have the floors and walls to a sufficient height constructed of an impervious material. The location, plans, and construction of such laundries or buildings shall be approved by the board of health or its agents.

Barber Shops—Sanitary Regulation. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 85. All barber shops, together with all furniture, shall be kept in a cleanly and sanitary condition. The floors shall be disinfected, washed, and scrubbed with hot water and soap or lye at least twice each week or oftener, if necessary.

Mugs, shaving brushes, razors, scissors, clipping machines, pincers, needles, and other steel instruments shall be sterilized by immersion in boiling water or in alcohol of at least 60 per cent strength after each separate use. Combs and brushes shall be thoroughly cleaned with water and soapsuds after each separate use.

A separate clean towel shall be used for each person. Alum or other material used to stop the flow of blood shall be applied only on a towel or other clean cloth.

The use of sponges and powder puffs is prohibited. Every barber shop shall be kept well ventilated and be provided with at least one wash basin or sink with an adequate supply of clean water. Every barber shall thoroughly cleanse his hands immediately before serving each customer. No person shall be allowed to use any barber shop as a sleeping room, and no foodstuffs or articles of food shall be permitted to be kept for sale in any barber shop. All barber shops must be entirely cut off from any place where articles of food are kept for sale and from rooms used for sleeping.

Stables and Disposal of Manure. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 86. Every owner, lessee, tenant, or manager of any and every building or place in or upon which any stall, stable, or apartment in the built-up portion of any city, town, village, or settlement in the Territory in which any horse, cattle, or other animal is kept, or of any place in which manure, stable refuse, or any liquid discharge of such animals shall collect or accumulate shall cause such manure, stable

refuse, or liquid to be promptly and properly removed therefrom, and shall at all times keep or cause to be kept such stalls, stables, or apartments, and the drains, yards, and appurtenances thereof in a clean and sanitary condition, so that no offensive odors shall be allowed to escape therefrom. Wherever necessary, such stable and the yard and appurtenances thereof shall be connected with the sewer, if accessible; otherwise to a properly constructed cesspool.

All stable manure and refuse awaiting removal shall be stored in a bin or pit. The size and construction of such bin or pit shall meet with the approval of the board of health or its agents. No stable manure, animal or vegetable refuse, night soil, or garbage of any nature which is dangerous to the public health shall be used for grading purposes or for filling up any house lot or other tract of land.

Domestic Animals—Keeping of—Disposal of Dead Bodies. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 87. *Pigs or swine.*—No person or corporation shall keep or allow to be kept upon premises in his or its possession, within the built-up districts of the Territory, any swine without first securing a written permit from the board of health or its agents. Such permit shall expire on the 1st day of July, annually, and be subject to the conditions thereof.

SEC. 88. The owner, lessee, tenant, or occupant of any stall, stable, or apartment in which swine are kept, or of any place in which manure, stable refuse, or any liquid discharge of such animals shall collect or accumulate, shall cause such manure, stable refuse, or liquid to be promptly and properly removed therefrom, and shall at all times keep, or cause to be kept, such stall, stable, or apartment, and the drains, yard, and appurtenances thereof, in a clean and sanitary condition, so that no offensive odor shall be allowed to escape therefrom.

SEC. 89. Floors, assorting boards, feeding troughs, gutters, and leaders shall be made of suitable hardwood planks, concrete, or other impervious material, so laid that they may be flushed with water, and with proper grades and channels to carry off all drainage.

False or loose boards are forbidden unless laid on concrete or other impervious material and of such size that the same may be readily removed.

SEC. 90. Dung pits, refuse bins, swill boilers, and other like appurtenances shall be fly proof and of such construction that no odor shall escape therefrom.

SEC. 91. It shall be unlawful to feed hogs any uncooked slaughterhouse offal or the uncooked flesh of dead animals.

SEC. 92. No person or persons shall collect or keep any hog or hogs in any pen, or otherwise confine any hog or hogs within the built-up districts of the Territory, so that the same shall become noisome or offensive to other persons residing in the neighborhood.

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SEC. 108. *Keeping of live stock, etc.*—No building, except a livery stable, shall be used for the keeping of horses or cattle within 25 feet of any dwelling house without a permit by the board of health or its agents.

SEC. 109. All henneries, dog kennels, and pens for any animals shall be kept clean and free from decaying food and from filth of any kind. The buildings and pens shall be whitewashed or disinfected and put in such sanitary condition as may be ordered by the board of health or its agents.

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SEC. 111. *Dead animals.*—No person shall throw or deposit any dead animal or animals on any of the public streets or highways in the Territory.

Swill and Offensive Refuse—Disposal of. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 93. No person shall permit or have any offensive swill or other liquid substance on his premises or grounds, to the prejudice of life or health, whether for use in any trade or otherwise.

SEC. 94. No person or persons shall collect any offal or swill, decayed meat, fish, or any animal or vegetable matter, nor transport the same through any street, highway, or public place, except in water-tight, securely covered containers, from which no odor can escape, and which will prevent spilling or leakage.

SEC. 95. All carts and vehicles for carrying swill, offal, or other nauseous or offensive substances, boxes, tubs, and receptacles in which any nauseous or offensive substances may be, or may be carried, shall be strong and tight and impervious to flies, and the sides shall be so high above the load or contents that no part of such contents or load shall fall, leak, or spill therefrom; and either the vehicle or vessel carried by it shall be so covered as to be inoffensive; and all such material shall be loaded or removed in a sanitary manner. Vehicles used for the conveyance of swill, offal, or other nauseous or offensive substances, shall not be used at any time for the transportation or conveyance of any meat, fish, vegetable, or other foodstuffs which are to be utilized for human consumption at any time or under any circumstances.

Poisons and Drugs—Sale of. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 96. The following substances shall be known as schedule A drugs and chemicals; they shall be held to constitute poisons within the meaning of chapter 86 of the Revised Laws, and shall not be sold except upon the prescription of a duly licensed practitioner of medicine (R. L., 1095):

Alpha eucaine.
Arsenic.
Beta eucaine.
Cannabis indica.
Chloral hydrate.
Cocaine.
Codeine.
Heroin.

Hydrocyanic acid.
Morphine.
Nux vomica (strychnine).
Oil of bitter almonds.
Opium.
Any of the salts, derivatives, compounds,
or preparations of the foregoing sub-
stances.

SEC. 97. The following substances shall be known as schedule B drugs and chemicals; they shall be held to constitute poisons within the meaning of chapter 86 of the Revised Laws and shall not be sold except under a special license from the board of health or by or under the direct supervision of a duly licensed physician or pharmacist:

Acetanilide.
Aconite (aconitine).
Antipyrine.
Belladonna (atropine).
Brucine.
Cantharides.
Conine (alkaloid of hemlock).
Croton oil.
Ergot.
Hydrastine (golden seal).
Savin.
Phenacetine.
Phosphorus.

Carbolic acid.
Chloroform.
Creosote.
Muriatic acid.
Nitric acid.
Oxalic acid.
Salts of mercury (corrosive sublimate, red
and white precipitate of mercury, etc.).
Sugar of lead.
Sulphuric acid.
Tartar emetic.

Any of the salts, derivatives, prepara-
tions, or compounds of the foregoing
substances.

SEC. 98. The following substances shall be known as schedule C drugs and chemicals and may be sold or delivered by persons who have no pharmacist license nor license to sell poisonous drugs where such substances are sold or delivered in the original unbroken packages, and a record of the sale kept, as provided for in section 1052, Revised Laws:

Fungicides.
Insecticides.

| Rat poisons.

SEC. 99. The box, phial, or other package in which any substance included under schedules B and C aforesaid may be sold or delivered shall bear a label containing the words "Poison" and "Laaui make" in large letters, together with emblematic devices showing the skull and crossbones.

Deaths—Registration of. Burial. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 100. All deaths occurring in the Territory of Hawaii must be reported to the registrar of deaths, with the name, sex, and age of the deceased, whether married or single, the nationality, place of birth, place of death, date of death, duration of last illness, cause of death, names of the consulting and attending physicians, whether deceased was a resident or nonresident, and the cemetery where burial is intended. No embalming or interment will be allowed on the islands of Oahu, Hawaii, Maui, Molokai, or Kauai without permission of an agent of the board of health, and within the district of Honolulu, island of Oahu, and the district of South Hilo, island of Hawaii, such permission must be in writing.

SEC. 101. No permit will be granted for an interment within the city limits of Honolulu, except to the owners of burial plots, and not to such owners except in such places and upon such conditions as the board of health upon investigation shall find will not jeopardize the public health.

The city limits above referred to include the district within the following boundaries: Beginning at the seashore at the south point of the land of Halawa, thence following the easy boundary of Halawa to the summit of the Koolau Mountains, thence easterly along the summit of said mountains to Palolo Valley, thence southerly following the line of the east ridge of Palolo Valley to the seashore at the east side of Diamond Head, thence following the seashore in a westerly direction to the point of beginning.

This section shall not apply to the burial of ashes of bodies which have been subjected to cremation.

SEC. 102. No interment of a corpse or dead body shall be made at a depth less than 6 feet below the surface of the ground, nor within 100 feet of any spring, well, lake, pond, or stream of water, nor within 2 feet of the line of any lot, nor in any place except where the board upon investigation shall find that such interment will not jeopardize the public health.

SEC. 103. No corpse, nor the remains of any dead human body shall be exposed, disturbed, or removed from its place of burial, nor shall the receptacle, container, or coffin holding such remains or corpse be opened, removed, or disturbed after due interment, except according to the terms of a permit granted therefor by the registrar general. A fee of \$2.50 will be charged for issuing such permit.

After any such removal or disturbance, the grave shall be filled at once and restored to its former condition.

SEC. 104. No corpse, or remains of any dead human body, whether attended by a licensed physician or unattended before death, shall be removed from its place of death without permission from an agent of the board of health.

**Communicable Diseases—Quarantine—Disinfection—Burial. (Reg. Bd. of H.,
Feb. 11, 1915.)**

SEC. 105. *Deaths from contagious or infectious disease.*—The body of a person who has died of cholera, diphtheria, plague, smallpox, scarlet fever, typhus fever, or yellow fever, shall be thoroughly disinfected and shall not be exposed to the view of any person, who is not necessarily engaged in the preparation of the same for burial. It shall be wrapped in a sheet saturated in a solution of bichloride of mercury 1-1000, and placed in a casket or coffin, which shall be sealed and which shall not be reopened.

An undertaker, or other person, having in his care or possession the body of any person who has died of cholera, diphtheria, plague, smallpox, scarlet fever, typhus fever, or yellow fever, shall give immediate notice to the board of health or its agent. Within 24 hours after the death of a person from any such contagious disease a private funeral shall be held at which none but the immediate adult relations and clergyman shall be present. The body shall be conveyed immediately to the place of burial or cremation.

SEC. 106. In any district where a death has occurred, or a patient is found to be suffering from any malignant, contagious, or infectious disease, the board of health, or its agents, shall have the right to summarily proceed to said district and cause all buildings, within a radius of not more than one mile from the place where said death occurred, or said patient was found, which they shall judge to be infected, or in an insanitary condition, and a menace to the public health, to be thoroughly disinfected by fumigation or other means, and all persons residing or working in any such buildings, and all personal property therein, to be thoroughly disinfected, to the satisfaction of the board of health, or its agents, before either persons or property shall be removed therefrom; and, that thereafter all such insanitary buildings and properties shall be vacated immediately, and no person shall be allowed to live or work therein, or to store any goods therein, until the same shall have been placed in a sanitary condition.

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SEC. 118. *Disposal of infected articles.*—No person shall sell, give away, or otherwise dispose of, within the Territory, any bedding, clothing, or other article or thing, which has been used by, or come in contact with, any person suffering from any contagious, infectious, or communicable disease, unless the same has been sterilized or disinfected under the supervision and direction of the proper agent of the board.

SEC. 119. *Release from quarantine.*—No person who has been quarantined for Asiatic cholera, diphtheria, leprosy, plague, scarlet fever, scarlatina, tetanus, typhus fever, variola, varioloid, yellow fever, or any other contagious or infectious disease, where on account of the surroundings and for the protection of the public health it has been necessary to establish a quarantine, shall be discharged therefrom except upon a written order of the board of health or its duly authorized agent.

Nuisances. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 107. *Definition of nuisance.*—To render or maintain either impure or unwholesome the air, the soil, the public highway, any structure, any food, drink, or medicine, or to sell or lease that which has been rendered impure or unwholesome, or needlessly put in jeopardy human life, health, or physical comfort in any manner whatsoever, or to aid in so doing, is hereby declared to be a nuisance within the meaning of this code.

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SEC. 110. No person shall permit or have any offensive water or other liquid or substance on his premises, to the prejudice of life or health, whether for use in any trade or otherwise.

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SEC. 112. *Hides and skins.*—No person will be allowed to dry, salt, or tan hides or skins, or to store the same, in any place in the Territory not first approved by the board of health or its agents.

Flies—Prevention of the Breeding of. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 113. No person, firm, or corporation shall suffer or permit or have upon their premises, whether owned, leased, or occupied by them, either one or more of the following insanitary fly-producing, disease-causing conditions, to wit:

- (1) Manure which is not securely protected from flies.
- (2) Any privy, vault, cesspool, sink, pit, or like place which is not securely protected from flies.
- (3) Garbage which is not securely protected from flies.
- (4) Vegetable waste, trash, litter, rags, or refuse of any kind, nature, or description in which flies may breed or multiply.

Mosquitoes—Prevention of the Breeding of. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 114. No person shall have, keep, maintain, or permit within the Territory of Hawaii any cistern, tank, well, or other receptacle of similar character, containing water in which mosquito larvæ breed, or any pond, pool, spring, fountain, or other body of water of similar character, in which mosquito larvæ breed, unless the same shall be kept constantly treated with a solution of copper or other chemical agent or constantly covered with kerosene or petroleum oil or other substance, so as effectually to prevent the breeding of mosquito larvæ in the water therein or thereof; or constantly kept free of vegetable growth and other obstructions, and stocked with mosquito-destroying fish; or constantly so screened with wire netting of at least 18 wires to the inch each way, or otherwise so covered as to prevent the ingress and egress of mosquitoes to and from the water therein or thereof.

SEC. 115. No person shall have, keep, maintain or permit on any land or premises owned or controlled by him within the Territory of Hawaii any can, pitcher, bowl, bottle, tub, bucket, barrel, trough, urn, water-closet, water-closet tank, basin, sink, trap, or other receptacle of similar character, containing water in which mosquito larvæ breed, unless the same shall be completely emptied and dried or cleansed daily, or constantly protected as prescribed in section 114 hereof.

SEC. 116. No person shall have, keep, maintain or permit on any land or premises owned or controlled by him within the Territory of Hawaii any gutter or drain or roof unless the same shall be kept thoroughly clean, and be so constructed or perforated that any water that may fall or be placed therein will immediately and completely drain off, or unless the same shall be constantly kept so screened, or otherwise covered, as to prevent the ingress or egress of mosquitoes to or from any water therein or thereon.

SEC. 117. No person shall have, keep, maintain or permit on any land or premises owned or controlled by him within the Territory of Hawaii any cesspool, privy vault, surface drain, street drain, catch basin, sewer, wash rack, excavation, or other place of similar character, containing liquid in which mosquito larvæ breed, unless the same shall be kept constantly treated, screened or covered as prescribed in section 114 hereof.

Vegetables—Growing and Sale of. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 120. *Growing and sale of vegetables.*—No vegetables shall be grown in the Territory of Hawaii by any person, firm or corporation, for sale for human consumption until a written permit for such purpose shall have been granted to such person, firm or corporation, by the Territorial board of health or its proper agent.

SEC. 121. It shall be unlawful to use human excreta, whether in liquid or solid form, as a fertilizer where vegetables are grown within the Territory of Hawaii for human consumption.

Schools—Certificates of Health Required from Teachers and Pupils. (Reg. Bd. of H., Feb. 11, 1915.)

SEC. 123. The teacher and scholars in all public and private schools throughout the Territory shall provide themselves, within fourteen days after the opening of the annual school term, with certificates signed by some duly licensed and competent physician, as to their freedom from any contagious, infectious or communicable disease. Such certificates shall be upon forms approved by the board. Physicians appointed by the board will visit each school in their district for the purpose of making the necessary examinations of those not provided with certificates.

Said certificates shall be renewed each year and for the protection of the public health a certificate shall be required as a condition of connection with a stay [sic] in school.

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